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MINES AND BOOBY TRAPS USED BY THE VIET CONG
IN SOUTH VIETNAM

ENGLISH VOLUME

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MINES AND BOOBYTRAPS USED BY THE VIET CONG IN SOUTH VIETNAM

November 1965

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FOREWORD

The purpose of this publication is to save lives and preserve equipment. Mines and boobytraps have exacted a heavy toll of lives and property in Vietnam. Many of these casualties could have been prevented through proper care and caution based on a knowledge of such devices and the techniques of their employment. Even though of limited scope, this booklet, used in combination with other available information, will enable personnel to recognize and avoid the hazards associated with mines and boobytraps. Particularly recommended as supplementary sources of information are the Department of the Army Field Manual 5-31, "Use and Installation of Boobytraps", and FM 20-32, "Land Mine Warfare".

Personnel using this booklet are requested to forward comments, corrections, and additions to the ACofS, J2, MACV, ATTN: Intelligence Division.

J. A. McChristian

J. A. McCHRISTIAN
Brigadier General, U. S. Army
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MINES AND BOOBYTRAPS EMPLOYMENT

I. INTRODUCTION.

1. PURPOSE.

This booklet provides information on the Viet Cong techniques of mine and boobytrap employment and on some of the devices that are used.

2. SCOPE.

a. This publication covers various VC methods of employing land mines, water mines, explosive boobytraps, and non-explosive boobytraps. Sections are included that identify specific U.S., Soviet, and Chicom fuzes and mines, and typical locally fabricated mines.

b. Also included are safety and disarming procedures which emphasize the precautions a soldier must observe when handling mines and boobytraps.

3. RELATED PUBLICATIONS.

Since this booklet is limited in scope, it should be used in conjunction with FM 5-31, "Use and Installation of Boobytraps", FM 20-32, "Land Mine Warfare", and TM 9-1345-200, "Land Mines".

INITIATING ACTIONS

TÁC ĐỘNG LÀM NỔ

PRESSURE
ÉP

PULL
KÉO

Figure 1
Hình 1

4. TERMINOLOGY. (See Glossary for other terms).

a. A mine is an explosive device designed to destroy or damage vehicles, ships, boats, or aircraft or to wound or kill personnel. It may be detonated by the action of its victim, by the passage of time, or by controlled means.

b. A boobytrap is a device that will injure a person who disturbs an apparently harmless object or performs a presumably safe act.

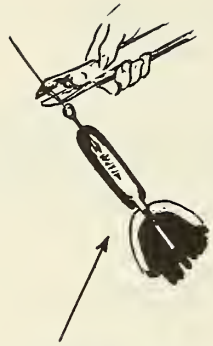
c. A fuze is a mechanical device used to initiate a detonation. Fuzes are provided in many forms and sizes. Some have instantaneous action while others have some sort of a delay mechanism. There is a difference between fuze and fuse. A fuse is a burning device that transmits a flame to ignite nonelectrical blasting caps, firecrackers, or similar items.

d. A firing device is a mechanism designed to initiate an explosive train. When fitted with a blasting cap, it may be used as a fuze. These devices are known in foreign armies as fuzes, switches, or igniters.

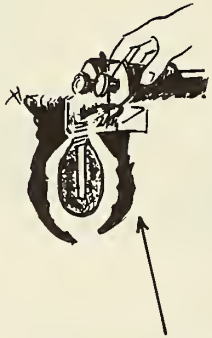
e. A friction igniter is a device designed to fire either a detonator or blasting cap or to ignite an attached fuse. Pulling a stripping wire causes a coated wire or friction cord to be stripped through a flash or friction compound. This action ignites the compound, which in turn fires the detonator, cap, or fuse.

INITIATING ACTIONS

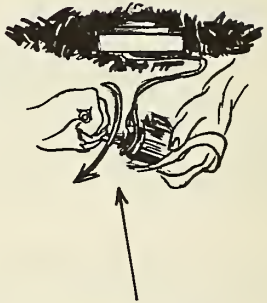
TÁC ĐỘNG LÀM NỔ



TENSION RELEASE
SỨC CĂNG THẢ TRÙNG



PRESSURE RELEASE
LẤY VẬT ĐÈ BÊN TRÊN



ELECTRICAL
ĐIỆN

Figure 2
Hình 2

f. A detonator is a high explosive element in an explosive train which is used to create or transmit a detonation wave to a booster or main charge of explosive.

g. The initiating action depends on the design of the fuze. Most fuzes are designed to be initiated by one of the following actions (figures 1, 2):

(1) Pressure. The pressure of a man's foot or the wheel or tread of a vehicle causes the fuze to function.

(2) Pull. A pull on a wire, called a trip wire, attached to the fuze initiates the fuze action.

(3) Tension Release. Cutting a trip wire releases the tension needed to keep the fuze from functioning.

(4) Pressure Release. Removing a restraining weight allows the fuze to function.

(5) Electrical. Closing an electrical circuit initiates the fuze action.

II. LAND MINES.

1. GENERAL.

There are two general classes of land mines, antipersonnel and anti-

vehicular. The methods of employment may differ somewhat for the two, but many of the same dangers exist in the case of both types of mines. In this section, the land mine techniques will be covered. Specific mines are described in Section V.

2. TYPICAL METHODS OF ACTUATION.

a. Trip wires. Trip wires may be used with any type of mine or improvised explosive, either buried or above the ground. Wires can be set up with pull release devices, tension release devices, or friction igniters. Trip wires are usually well concealed and difficult to detect. They may be mixed with dummy wires to confuse detection teams and may have both ends boobytrapped. Trip wires normally are used with devices that have a zero time delay element in the fuze which produces an instantaneous explosion. To avoid casualties during disarming, do not cut any wires until both ends have been checked for boobytraps.

b. Electrical detonation. The VC often use command detonated mines. One method requires a man to be concealed some distance from the explosive with a battery pack or hand held generator which is connected by wires to the mine. When troops or vehicles are in a position where the mine will do the most damage, the VC detonates it. It is important to check trees, bushes, and the edges of roads for wires. If wires are found, they should be cut one at a time. Watch out for electrical wires used as trip wires and connected to tension release devices. When such wires are cut, boobytraps may explode.

MINED
DIRT ROAD OR TRAIL
ĐẶT MÌN Ở ĐƯỜNG ĐẤT HOẶC ĐƯỜNG MÒN

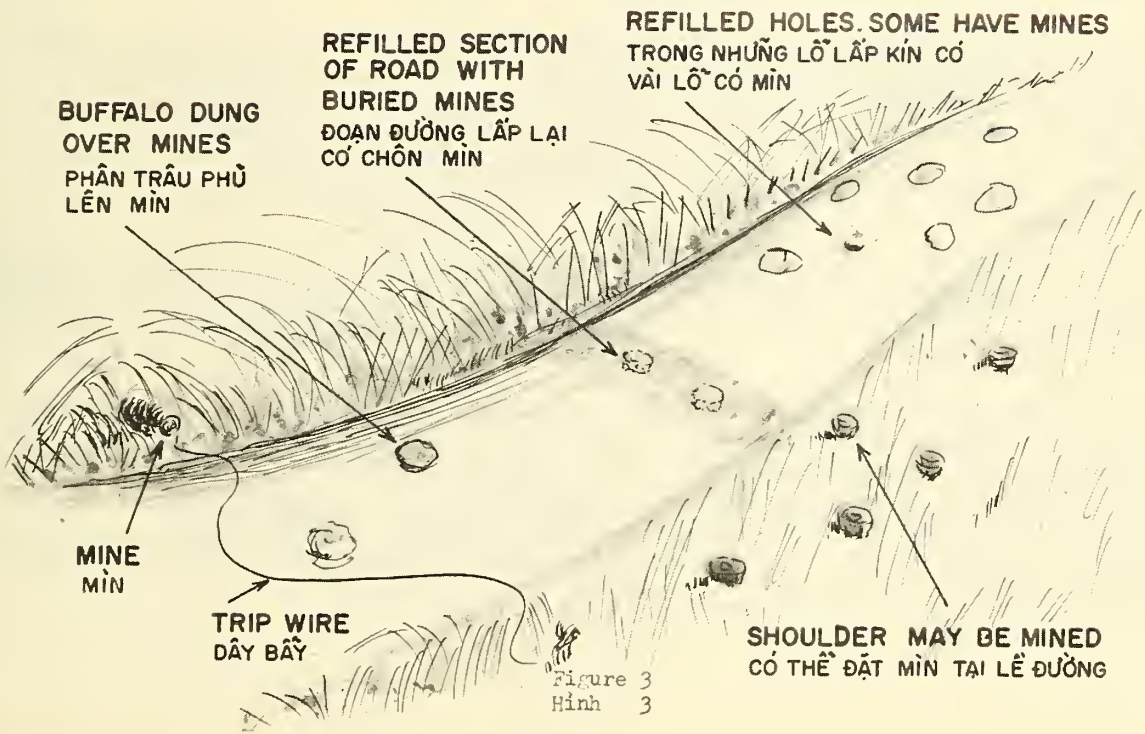


Figure 3
Hình 3

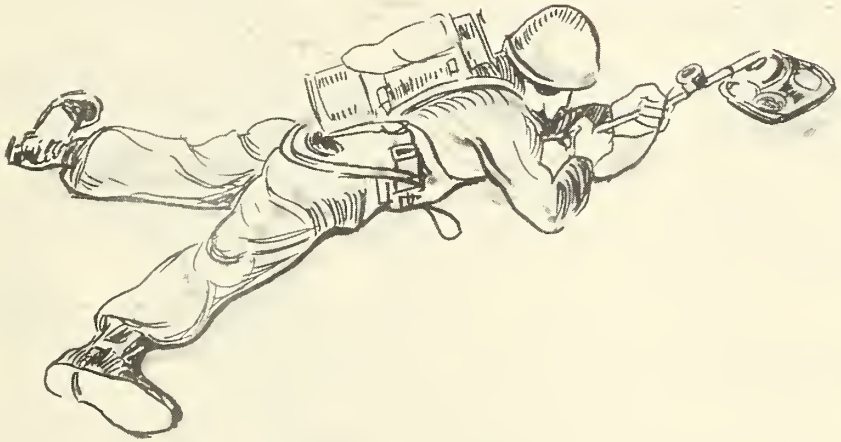
c. Pull wire. This is another command detonation device that is commonly used. A pull wire is connected to a pull release device or to a friction igniter, and a VC conceals himself at the other end. When a target is in position, the VC pulls the wire and detonates the mine. The same precautions apply here as apply to the trip wire.

d. Pressure Devices. These devices are commonly employed in anti-vehicular and smaller AP mines. Mines using these devices can be buried, which makes detection difficult. Mine clearing parties must conduct meter by meter sweeps of the area as prescribed in FM 20-32.

3. METHODS OF EMPLOYMENT ON DIRT ROADS AND TRAILS (figure 3).

a. Dirt roads and trails are easily mined, since the traces normally can be completely eliminated. In instances where traces cannot be eliminated, the VC use a number of tricks in addition to the normal mine laying techniques used by both sides.

b. One unusual tactic takes advantage of the mine detection personnel's carelessness. The VC dig up the road and leave, a normal method of cutting lines of communications. Friendly troops fill in the dug up sections and the VC return to lay mines in the refilled areas. These areas must be checked day after day even though nothing is found. The VC expect you to assume an area is still clean after it has been checked and to become careless and not recheck it.



USING A MINE DETECTOR

SỬ DỤNG MÁY DÒ MÌN

Figure 4
Hình 4

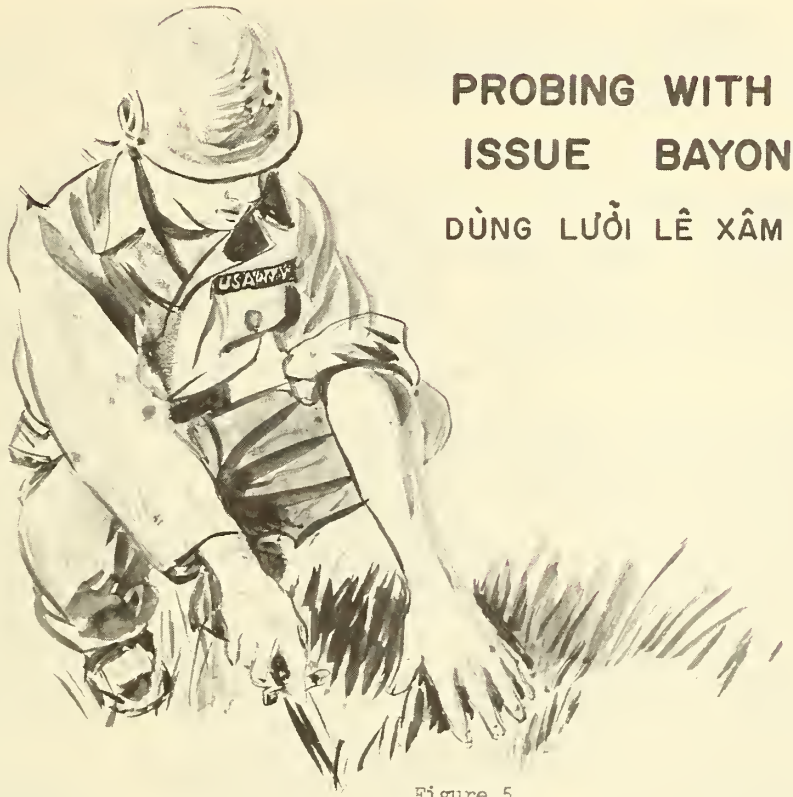
c. The VC may dig holes in the road, lay mines in a few of them, and refill them with dirt. After the mine detecting teams check dozens of holes and find nothing in most of them, the next hole may be expected also to be empty and may not be checked. That carelessness is what the VC expect, for they have probably mined that particular hole, hoping you will ignore it.

d. Some mines may be planted and then covered with straw, grass, dung, or any natural looking substance. The way to avoid casualties is to check everything.

e. Remember, the above tricks are used in addition to the normal methods of mine laying used by most armies. The best method of detecting the mines can be summed up as follows:

(1) Check all places newly refilled with soil, covered with straw or grass, littered with dung, or any suspicious looking spot.

(2) Do not depend solely on a mine detector (figures 4, 5). The detector works on the principle of a magnetic field and has a limited range. If the batteries are weak or the detector malfunctions, the mine will not be found. Then, too, the enemy may employ non-metallic mines. To counter this tactic, the team should gingerly probe the suspected area with a metal rod or bayonet in addition to using the detector. The probing should be done at an angle to the ground to lessen chances of setting the mine off. Proper mine clearing procedures are prescribed in FM 20-32.



PROBING WITH AN ISSUE BAYONET

DÙNG LƯỠI LÊ XÂM MÌN

Figure 5
Hình 5

MINED HARD SURFACED ROAD
ĐẶT MÌN TRÊN ĐƯỜNG CƠ TRÀI ĐÁ

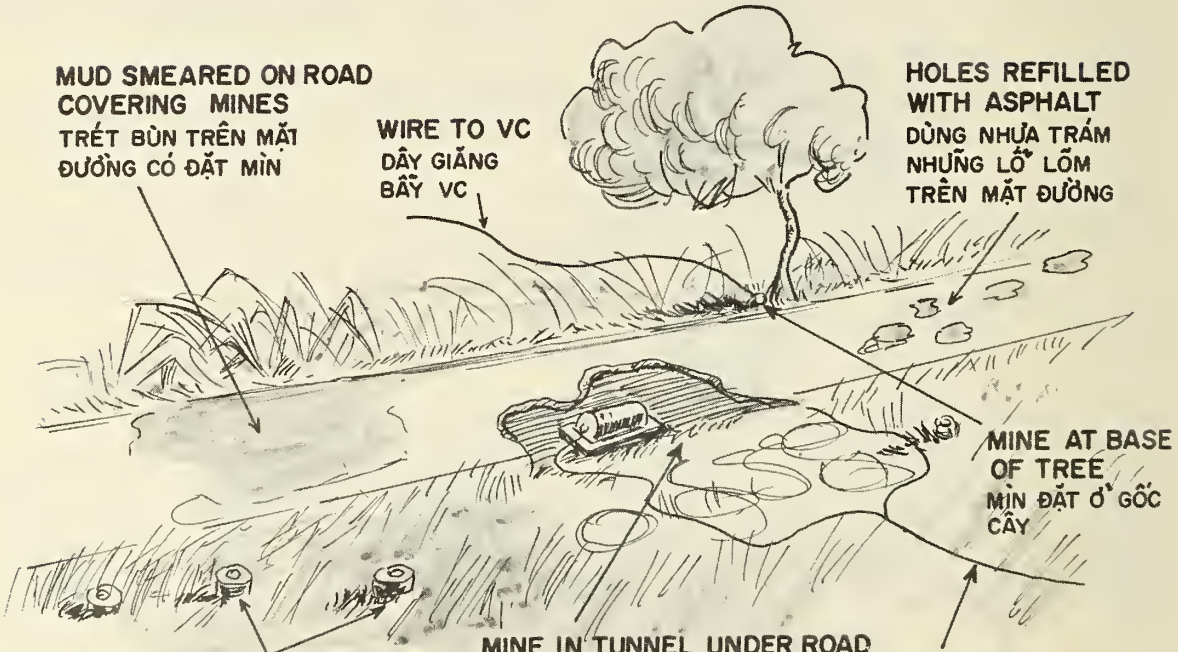


Figure 6
Hình 6

(3) Be patient and continually check and recheck possible mine locations. Do not fall into the trap of assuming there is no mine in a hole because it wasn't there yesterday. The VC want you to do this.

(4) Work with the local people who may be able to provide information on possible VC mine laying operations.

4. METHODS OF EMPLOYMENT ON HARD SURFACED ROADS (figure 6).

a. Hard surfaced roads present a more difficult problem of concealing mines than do dirt roads. The VC may come up with some very effective ways to trick mine detecting teams.

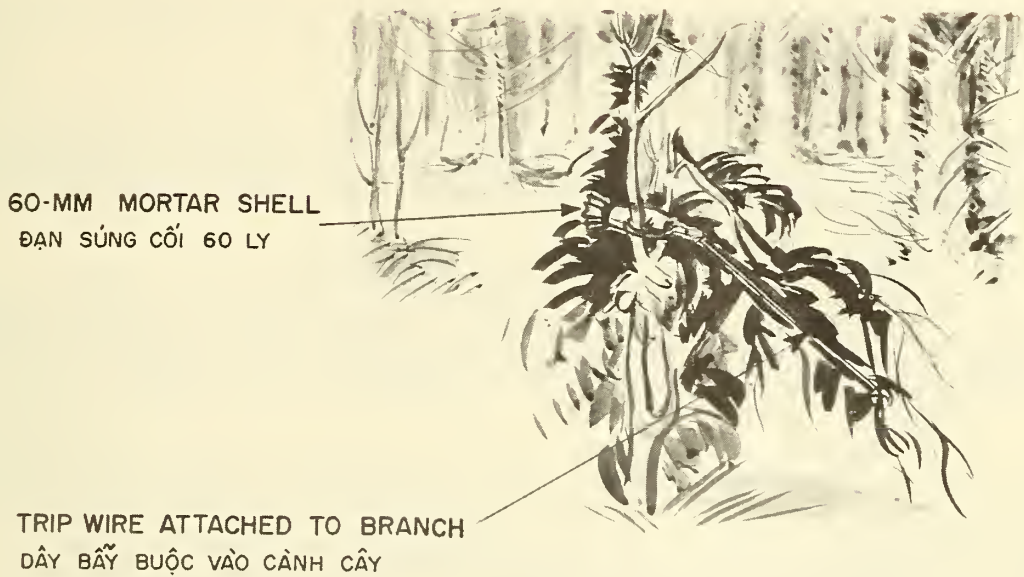
b. The VC tunnel under the road from the shoulder and plant a mine. The VC prepares the mine for command detonation, usually electrical, and carefully fills in the tunnel. Traces of this burrowing activity can be eliminated because of the dirt shoulder. The leads to the mine are concealed and generally terminate in a place where a VC can hide while waiting for his victim. This setup is a very difficult one to detect and requires careful inspection of the shoulders of the road for wires or traces of digging. If wires are found, they should be checked and cut. Then the mine must be dug up and disarmed or destroyed.

c. Tricks are employed which are similar to those used on dirt roads. One of these includes digging up sections of the road. After these areas are filled in, the VC return and lay mines in a few of them. This is the same tactic used on dirt roads and is countered in the same way by constant checking.

d. The VC smear the road with mud. This condition forces a mine detecting team to check the area carefully. The smearing may go on for several days until one day the VC emplace mines in the muddied sections. The mine detecting teams, having checked the areas before with no results, may become a little careless and miss these mines. Again, this carelessness is what the VC expect. The smeared areas must be carefully checked each time troops must cross them.

e. Another trick is to dig up the road, lay the mine, and refill the hole with asphalt. A spot usually remains that contrasts with the surfounding asphalt. To avoid detection, the VC use a tire to mark across the patch and blend it in with the road surface. To counter this tactic, the detection team must be alert for any signs of road repair. Each spot must be carefully checked with a detector and a probe.

f. The soft earth shoulders of surfaced roads are often mined. This tactic is easily accomplished and provides an effective trap for unwary troops. This method is not limited to hard surfaced roads but also may be used on dirt roads and trails. Roadside mining is used most often in ambush sites where the vehicles and men are to be driven off the road by fire. Heavy casualties



TREE MOUNTED ANTI-PERSONNEL MINE

MÌN CHỐNG NGƯỜI ĐẶT TRÊN THÂN CÂY

Figure 7
Hình 7

have resulted in this type of operation. Again, the watchword is caution and thoroughness when clearing the road.

g. These methods may be countered with the same techniques used in countering dirt road mining. Successful clearing operations require patience and thoroughness. The procedures prescribed in FM 20-32 should be used to insure maximum effectiveness and safety.

5. OTHER TECHNIQUES OF EMPLOYMENT (figure 7).

a. The VC use various methods to deceive their victims and to increase the effectiveness of the mines employed. These tricks are limited only by the user's ingenuity.

b. To lure soldiers into a trap, it has been common practice in other wars to use various items as bait. The VC also use this technique. Likely looking items will be left in areas that are mined and boobytrapped. These items may be weapons, VC flags, documents, uniforms, or just about anything that troops would be interested in from a souvenir, personal comfort, or intelligence standpoint. When a person goes to examine them, he is blown to bits.

c. The VC employ mines above the ground along land and water routes used by the enemy. This is a particularly favored and effective method of using mines improvised from artillery or mortar ammunition. The mines may be placed in rotten tree trunks, on sticks, next to or in termite mounds, at the

base of or in the branches of trees, in bushes, or in any concealment that affords a "sweeping" action for the fragments. In high grass areas the VC may just lay the mines on the ground with no other camouflage.

d. Mines may be laid on the bottom of stream beds for trip wire initiation, pressure intiation, or command detonation. These mines may be placed at fords or wherever troops could be expected to wade through the water.

e. The VC also employ mines in their defensive positions. The DH-10, a version of the US "Claymore" mine, is particularly effective as a defensive mine. The DH-10 mine, described later in this book, may be used against troops moving along roads, trails, or assaulting a position. The mine is most effective when employed along restricted paths. It may be rigged with a trip wire, but normally it is electrically detonated by a concealed VC.

6. LIKELY PLACES OF EMPLOYMENT.

a. This paragraph summarizes places where mines are most likely to be used, although you must expect the VC to employ mines anywhere.

b. Generally, mines are used wherever troops can be expected to bunch up, slow down, or present a good target. Such areas are bridges, curves in roads or canals, single track roads or trails, junctions, hill sides, huts, and likely rest areas. Any place that is a good ambush site is usually a good mine site, and mines are often employed with ambushes.

METHOD OF VC MINE MARKING

CÁCH ĐÁNH DẤU CHỖ ĐẶT MÌN CỦA VC

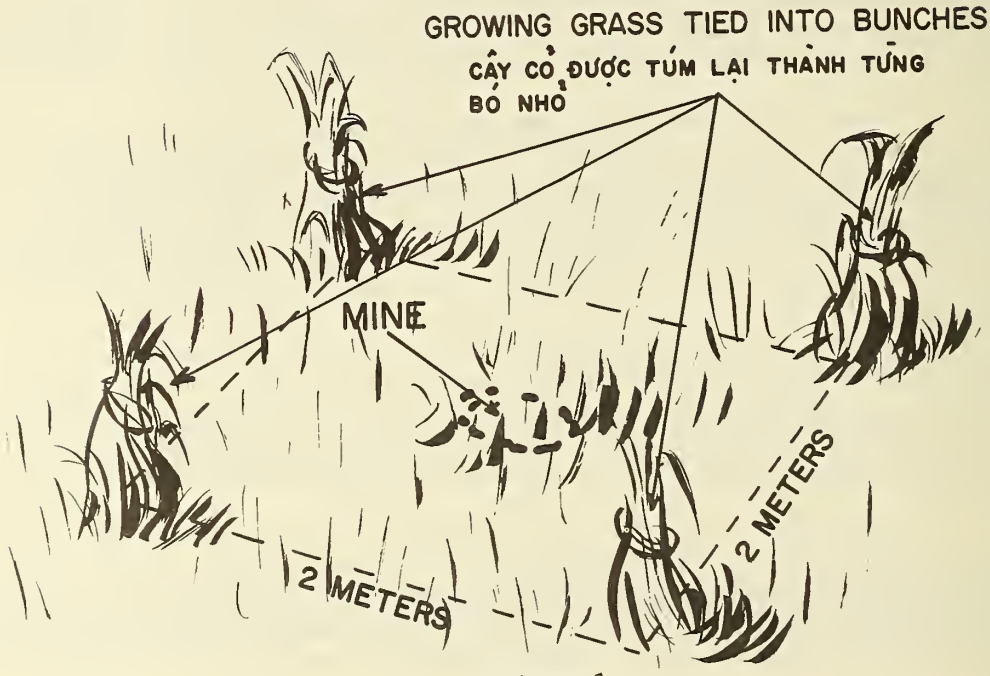


Figure 8
Hình 8

Since many of the larger mines are command detonated, the VC many times need a place of cover and concealment for the person who will initiate the mine. If an ambush is to be employed with mines, then the ambushers need positions affording protection from fragments.

7. VIET CONG METHODS OF MARKING MINES (figures 8, 9).

a. Not much is known about the VC methods of telling their own troops where mines are located. However, there are two methods that have been reported and are given here as examples. It is emphasized that these may not apply country-wide.

b. In one tactical zone, the VC tie growing grass into bunches at each corner of a 2 meter square. The mine is located in the center of the square.

c. Along roads and trails, sticks or stones may be used to mark mine fields. For example, in one tactical zone a stick broken at a right angle and lying across the road may mean a VC boobytrap or mine 200-400 meters ahead. A stick or length of bamboo lying parallel to the edge of the road or trail may indicate a clear route. Three sticks or stones, one at each side of the road and one in the center, may mean that the road should not be used.

METHODS OF VC MINE MARKING

CÁCH ĐÁNH DẤU CHỖ ĐẶT MÌN CỦA VC

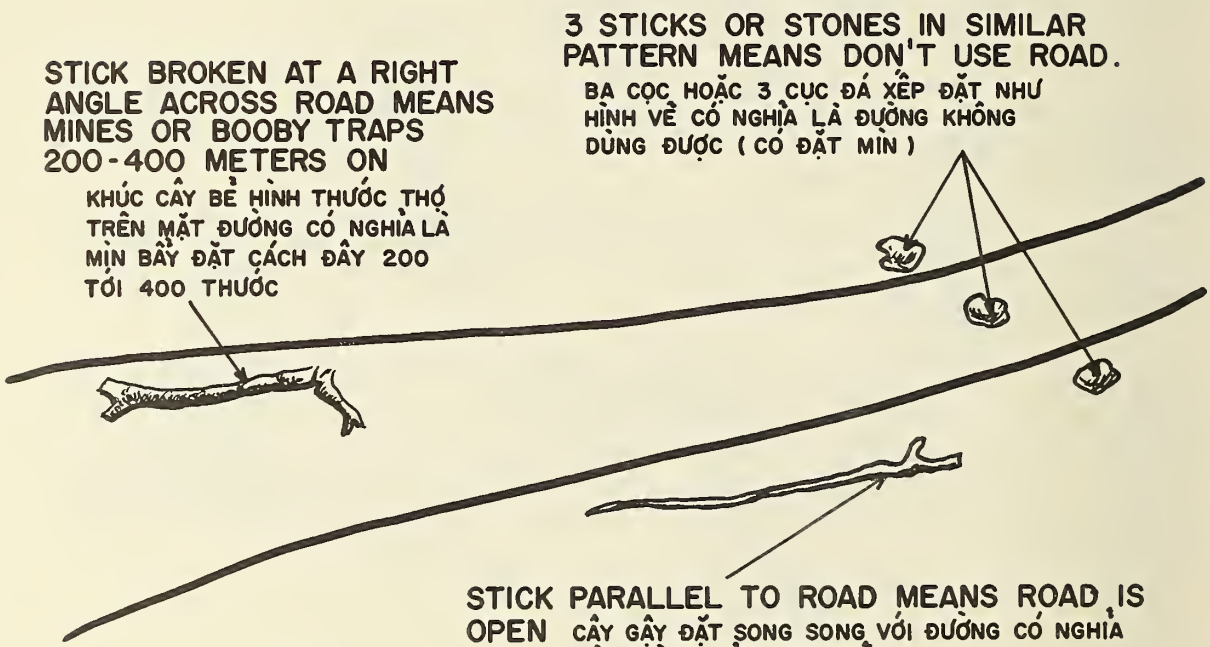


Figure 9
Hình 9.

III. WATER MINES.

1. GENERAL.

The VC have used water mines against the river fleet with a large measure of success. The mines have been locally fabricated, but they are very effective. Typical water mines are described in Section V.

2. TYPICAL METHODS OF INITIATING.

Water mines are exploded almost exclusively by command detonation, either electrically or by pull wire. This method requires electrical or pull wires running to the shore where a concealed man explodes the mine when a target passes.

3. METHODS OF EMPLOYMENT (figures 10-12).

a. Water mines have been used in canals and rivers. The techniques are similar in both applications.

b. The VC tie mines and explosives to tree trunks or put them into boats and place these items in the middle of the waterway. When a target passes by, the mine is exploded. The boat trick is particularly effective since it will lure someone in our friendly forces craft to investigate. When the tree trunks are employed, some form of camouflage, such as duck weed, is needed. The command detonation technique makes it necessary to check suspicious looking objects from a distance before approaching and to spot the wires leading to the shore.

WATER MINE

THUỶ LÔI

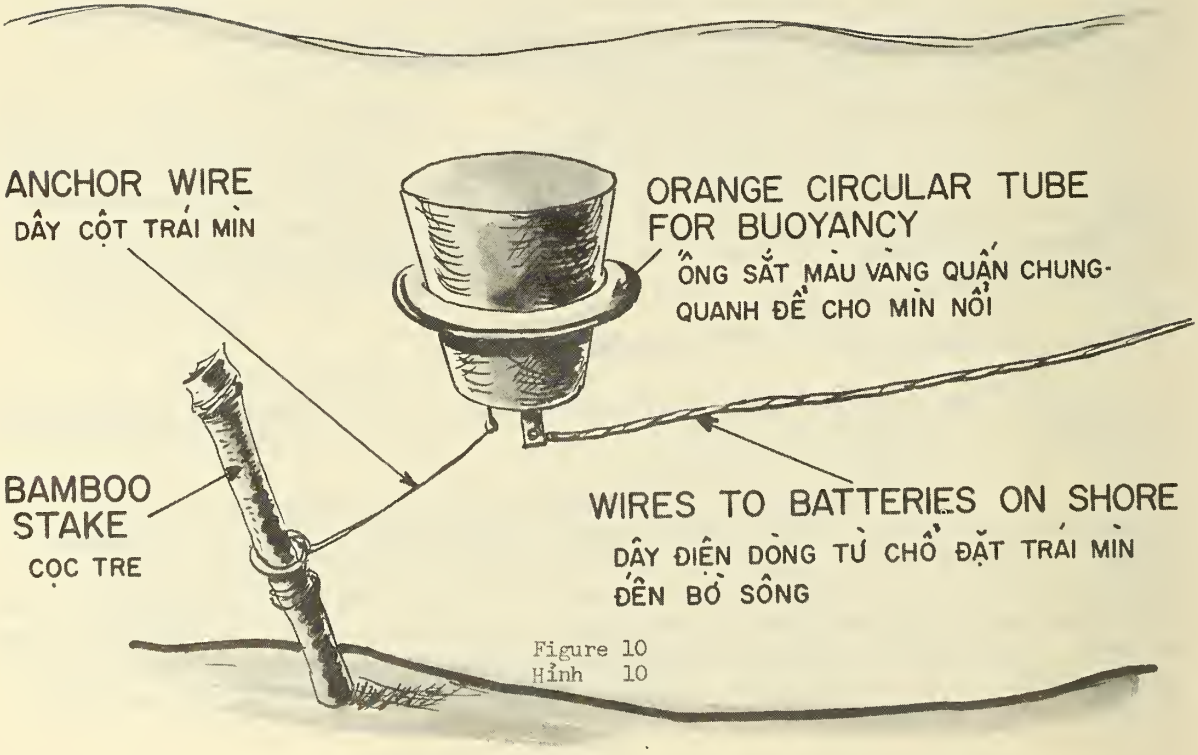


Figure 10
Hình 10

c. The VC have been known to plant command detonated mines in the bottom of shallow waterways, such as canals that are less than a meter in depth, even at high water. Friendly forces should be on the lookout for wires running to the shore which enable the VC to explode a mine when a vessel passes.

d. In deep channels, mines are set up at varying depths to best handle different vessels. Some of the mines may be controlled from the shore, while others are set at given depths. The mines can also be set up in such a manner that VC on the river banks can position them in the paths of targets.

e. Most water mines appear to have one thing in common; the detonation is usually initiated electrically. Conventional mine sweeping operations will detect these mines, but there is the danger that during the course of the operation a mine will be detonated by a VC on the river bank. Using information from local people is the best way to detect and to make provisions to eliminate a mine threat.

4. LIKELY PLACES OF EMPLOYMENT.

a. Water mine locations are similar to those for land mines. The VC seek to place water mines where vessels must slow down, bunch up, or stop.

b. The mines may be found at bends, narrow straits, and in mid-channel. Since some water mines can be positioned by the operator on the shore, they may be located anywhere in a channel. Since water mines are often used with ambushes, likely ambush sites are also likely mine sites.

WATER MINE
THUỶ LÔI

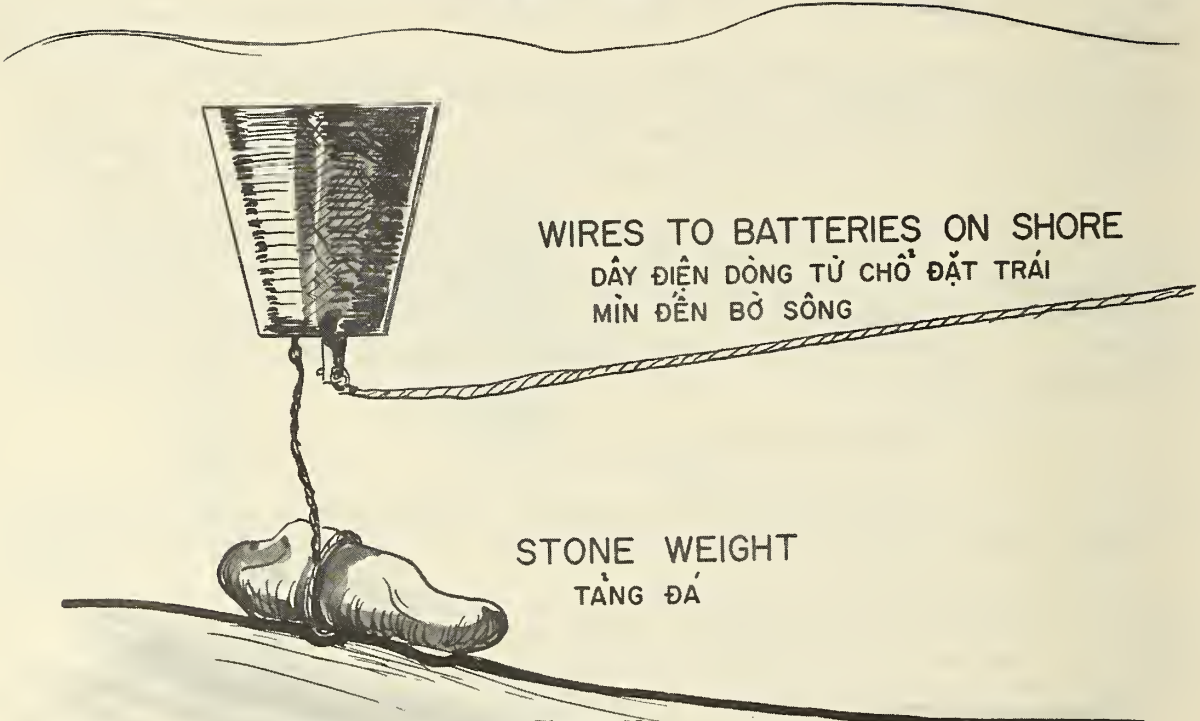
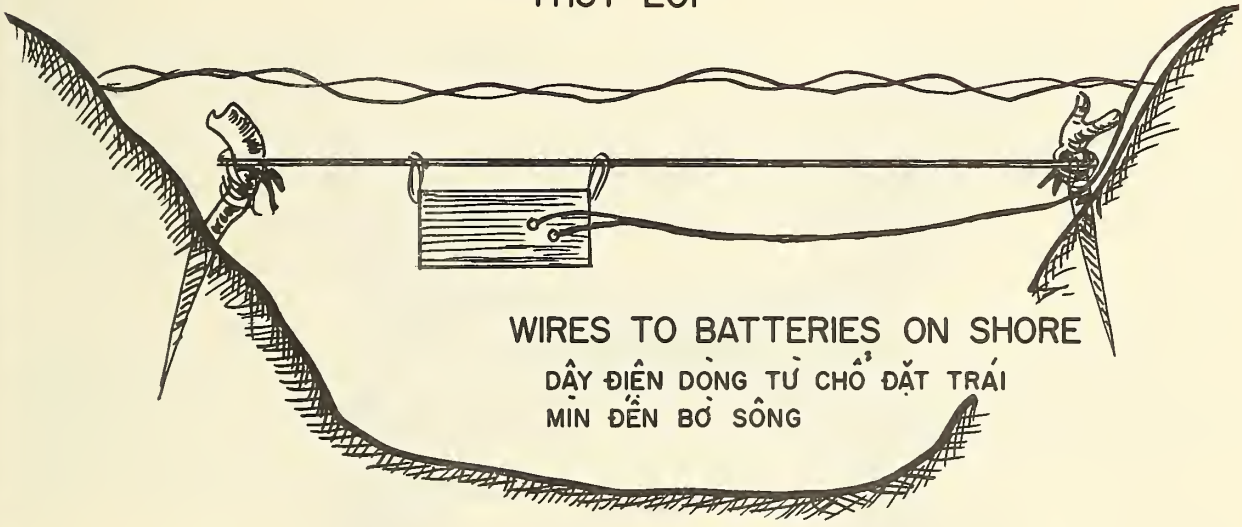


Figure 11
Hình 11

WATER MINE

THUỶ LÔI



MINE CAN BE MOVED BACK AND FORTH INTO PATH OF BOAT

MÌN CÓ THỂ DI ĐỘNG CHO HỘP VỚI HƯỚNG ĐI CỦA TAU

Figure 12
Hình 12

BOOBYTRAPPING ONE MINE TO ANOTHER

GÀI BẪY MÌN NỌ VÀO MÌN KIA

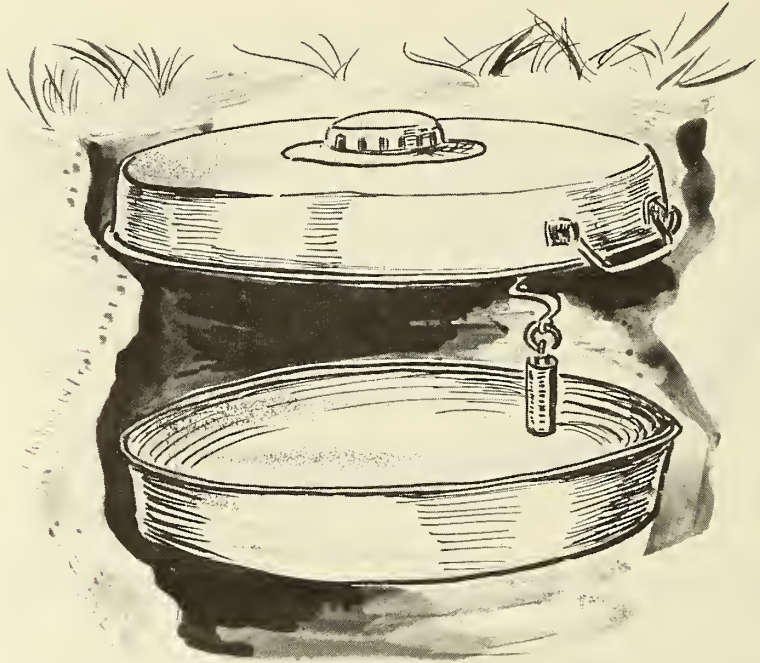


Figure 13
Hình 13

IV. BOOBYTRAPS.

1. GENERAL.

Boobytraps have been used from the earliest days of recorded history. Ranging from a simple hole in the ground to a complicated explosive device, the boobytrap is an effective way to cause enemy casualties and hamper enemy operations at a low cost to yourself. The effective use of boobytraps also undermines the morale of enemy forces. This section is intended to orient the soldier on the potential uses of explosive and non-explosive boobytraps encountered in Vietnam.

2. EXPLOSIVE BOOBYTRAP EMPLOYMENT.

a. Explosive boobytraps are extensively employed by the VC in all phases of their operations, from combat to sabotage. The traps vary from the simplest devices to fairly complicated items. Explosive boobytraps are initiated in the same manner as mines, using the same firing devices and fuzes. The tricks used to lure victims into mined areas are also used to lure them into boobytrapped areas.

b. One of the most common uses of explosive boobytraps is with mines. When mines are being cleared, each one must be checked for boobytraps. This involves searching for various devices that could possibly detonate a mine and that are in addition to the main fuzes (figures 13, 14).

MULTIPLE BOOBYTRAPPED MINE

MÌN GÀI NHIỀU BẪY

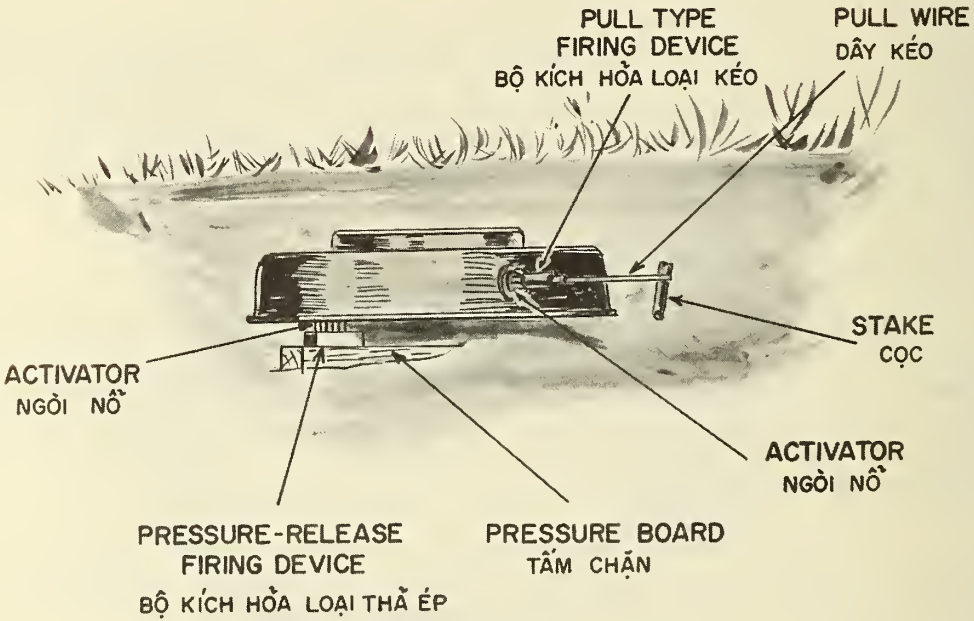


Figure 14
Hình 14

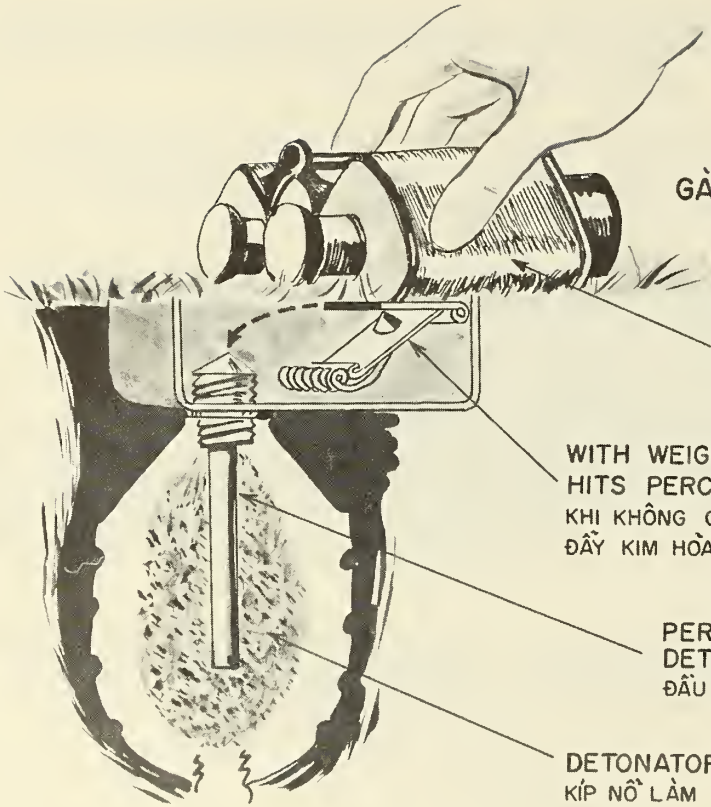
c. Items such as weapons, uniforms, dead bodies, binoculars, flags, vehicles, and a host of other objects may be rigged with explosive boobytraps (figures 15-18).

d. Buildings of all types offer the enemy unlimited boobytrapping opportunities. Entranceways, furniture, windows, floorboards, plumbing, and electrical circuits can be effectively boobytrapped (figures 19, 20).

e. Another type of boobytrap is the device that looks innocent but is deadly. Such devices take the forms of fountain pens, cigarette lighters, packages, and other ordinary items. These devices have been extensively used in the towns and cities. Two such devices are described in Section V.

f. Roads, trails, and paths offer excellent locations for boobytraps (figures 21-23). The boobytraps are usually attached to obstacles such as rocks or tree limbs. Troops in a hurry may brush by these, or hastily remove them, without checking for trip wires or pressure release devices. There may be dummy traps among the real ones which may annoy the average soldier to the point of becoming reckless.

g. Areas containing supplies are easily boobytrapped (figures 24-26). All caches of weapons, food, ammunition, and other materiel must be carefully searched for boobytraps before they are moved or destroyed.



BOOBYTRAPPED SOUVENIR

GÀI BẪY NỔ VÀO VẬT KỶ NIỆM

SOLDIER PICKS UP SOUVENIR ON TOP OF FIRING DEVICE
BINH SĨ NHẶT VẬT KỶ NIỆM ĐẶT TRÊN BỘ KÍCH HỎA

WITH WEIGHT GONE SPRING DRIVEN STRIKER HITS PERCUSSION CAP SETTING IT OFF
KHI KHÔNG CÒN SỨC ĐÈ BÊN TRÊN, THÌ LÒ SO ĐẨY KIM HỎA CHẠM VÀO ĐẦU CHẠM NỔ

PERCUSSION CAP SETS OFF DETONATOR
ĐẦU CHẠM NỔ LÀM NỔ KÍP NỔ

DETONATOR SETS OFF MAIN CHARGE
KÍP NỔ LÀM NỔ THUỐC NỔ CHÍNH

Figure 15
Hình 15

h. The number and types of explosive boobytraps are unlimited. As boobytraps are dependent only on the user's ingenuity, some tricky devices are encountered. To avoid hazards, be patient and thorough. A hasty approach will lead to trouble. Proper procedures are prescribed in FM5-31.

3. NON-EXPLOSIVE BOOBYTRAP EMPLOYMENT.

a. Non-explosive boobytraps will generally be employed in a manner similar to mines. The locations are the same, but these non-explosive traps are primarily aimed at personnel. Non-explosive boobytraps take various forms, but all take advantage of local materials and natural camouflage. Specific types are illustrated in Section V.

b. Non-explosive boobytraps are often employed with mines and at ambush sites. Such boobytraps provide a means of hindering the progress of troops moving along roads and trails. Muddy roads and trails provide the necessary camouflage for pits, and heavy vegetation will cover a multitude of traps. Open, grassy areas are not immune, as spiked plates and pits may be used. Stream beds are often boobytrapped at fords or wherever troops are likely to pass.

c. As with all boobytraps, the VC expect you to be in a hurry and not take the time to carefully check for these traps. The VC are extremely good at disguising their traps, and only a thorough, patient check of your route will reveal the traps. Indicators to watch for are shiny metal, flat areas, differences in color of vegetation, trip wires, and anything that appears to be out of place. Again, it is emphasized that the best way to avoid these hazards is to obtain information from the local people who generally know where the traps are located.

FIREWOOD BOOBYTRAP

BẪY NỔ GÀI VÀO CỦI ĐUN

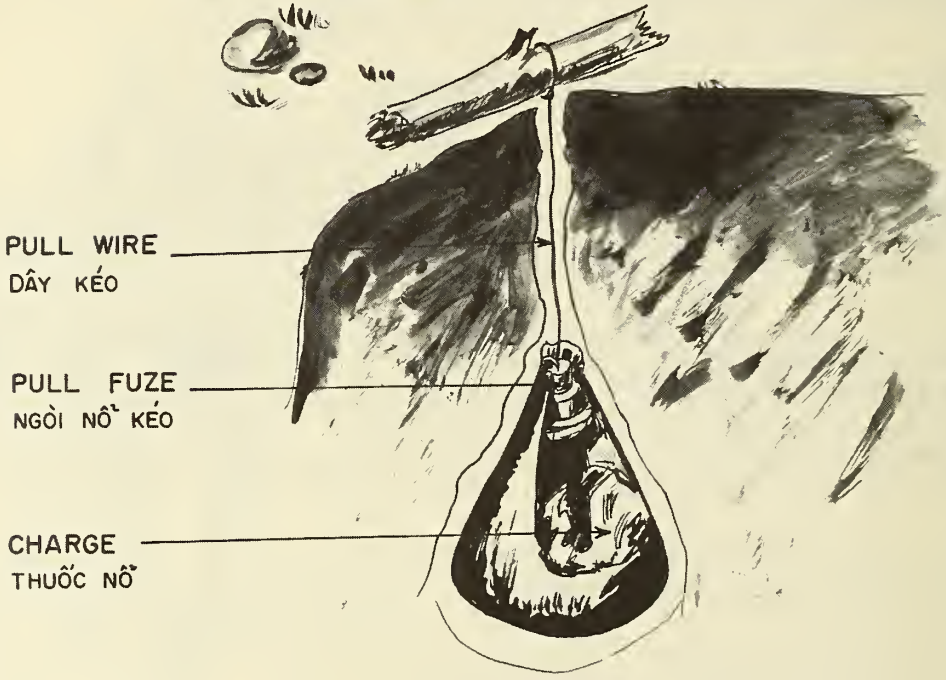


Figure 16
Hình 16

WAR TROPHY BOOBYTRAP

BẪY NỔ GÀI VÀO CHIẾN LỢI PHẨM

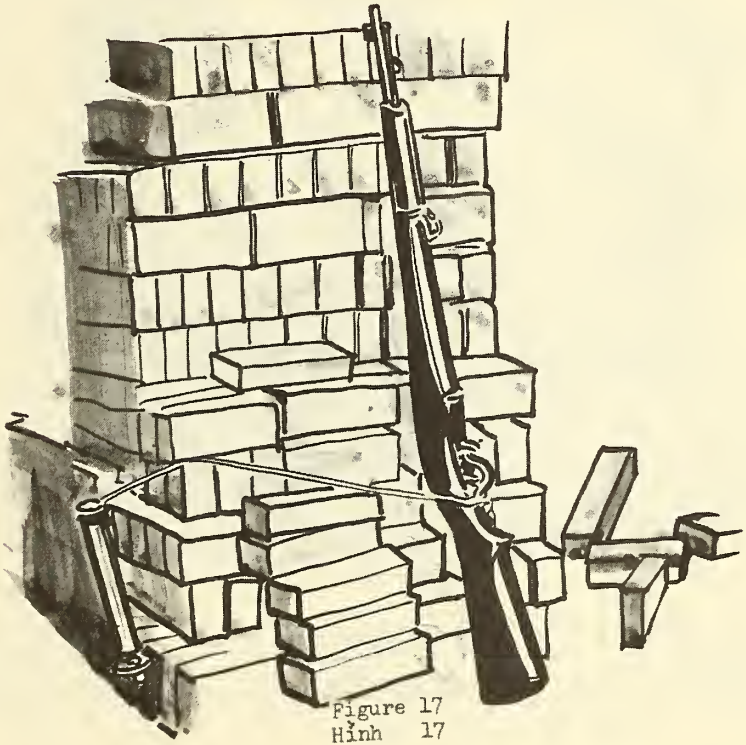
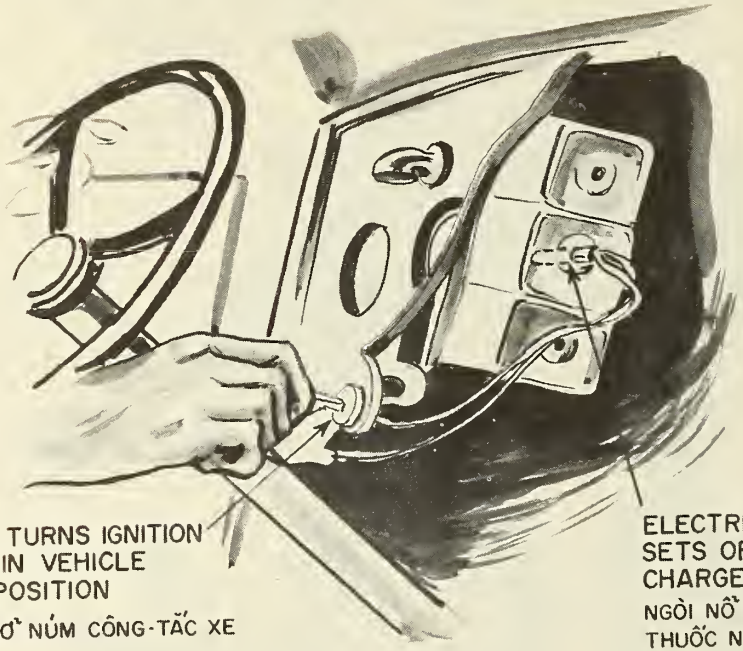


Figure 17
Hình 17



IGNITION BOOBYTRAP
BẪY NỔ GÀI VÀO NÚM CÔNG-TẮC XE

Figure 18
Hình 18.

BUILDING BOOBYTRAP - LOOSE FLOORBOARD

BẪY NỔ GÀI TRONG NHÀ - SÀN GỖ KHÔNG GHÉP CHẶT

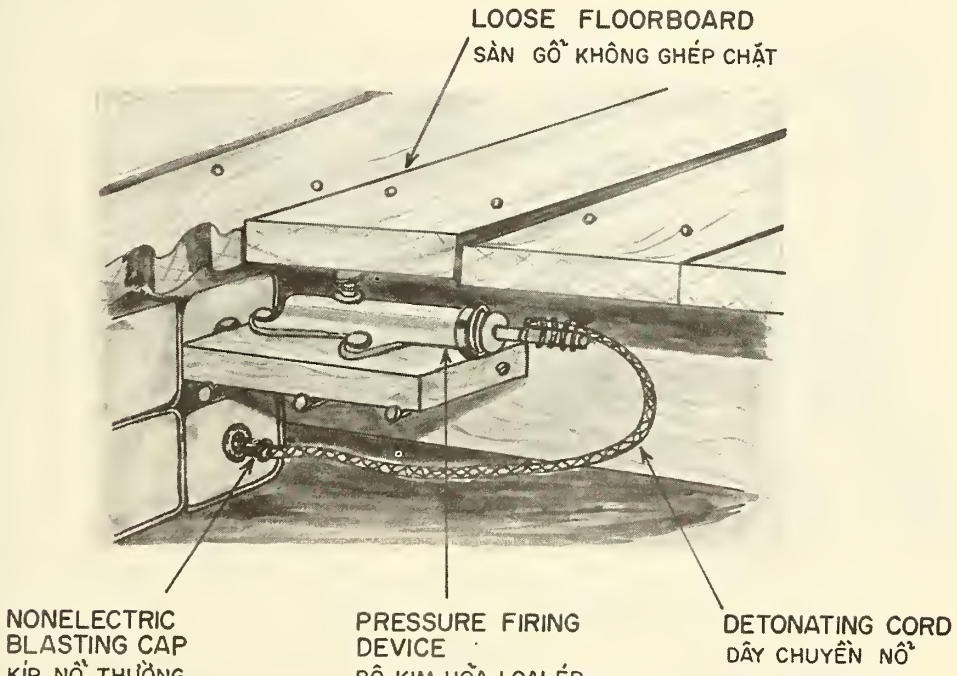
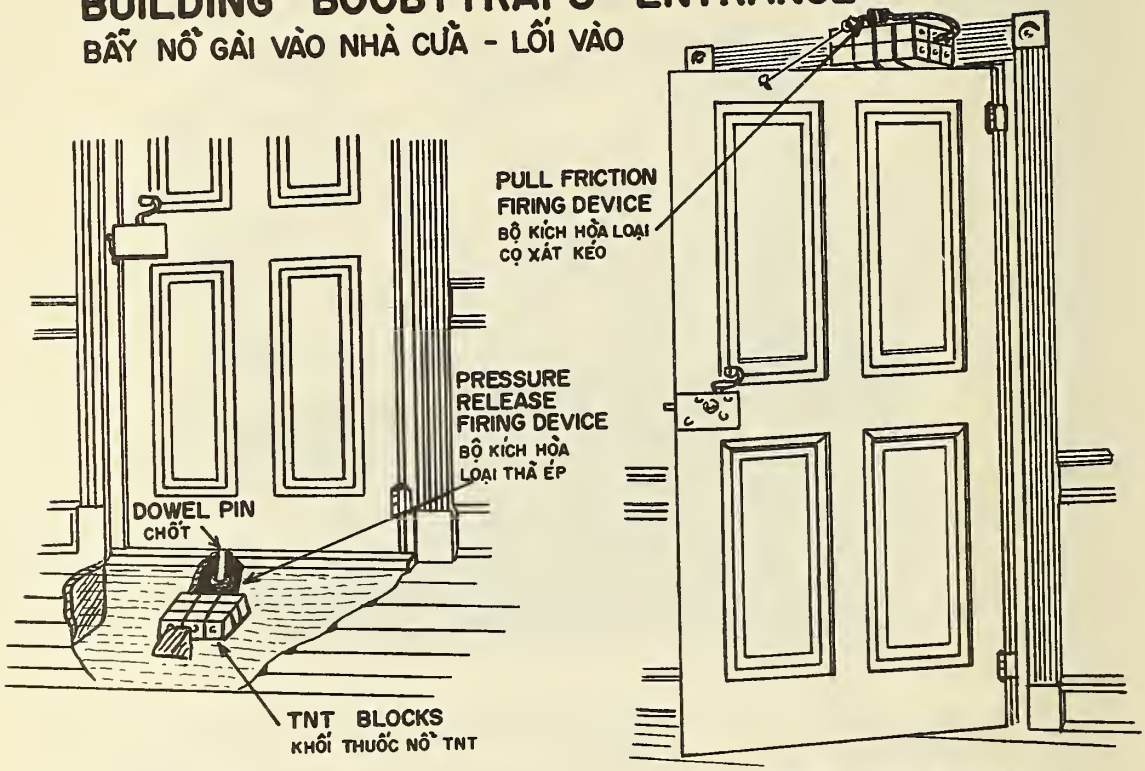


Figure 19
Hình 19

BUILDING BOOBYTRAPS - ENTRANCE
BẪY NỔ GÀI VÀO NHÀ CỬA - LỐI VÀO



CLOSED DOOR TRAP
BẪY NỔ GÀI VÀO CỬA ĐÓNG

OPEN DOOR TRAP
BẪY NỔ GÀI VÀO CỬA MỞ

Figure 20
Hình 20

OBSTACLE BOOBYTRAP

BẪY NỔ GÀI VÀO CHƯỚNG NGẠI VẬT

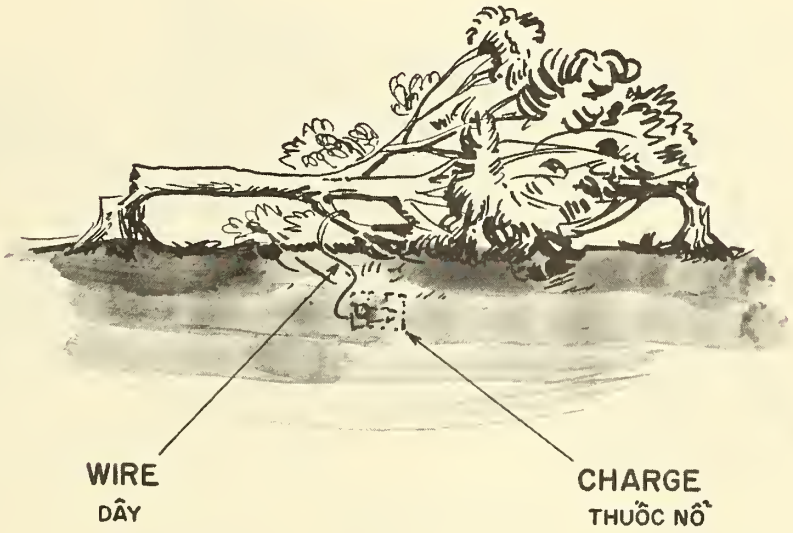


Figure 21
Hình 21

ROADSIDE BOOBYTRAP

BẪY MÌN VEN ĐƯỜNG

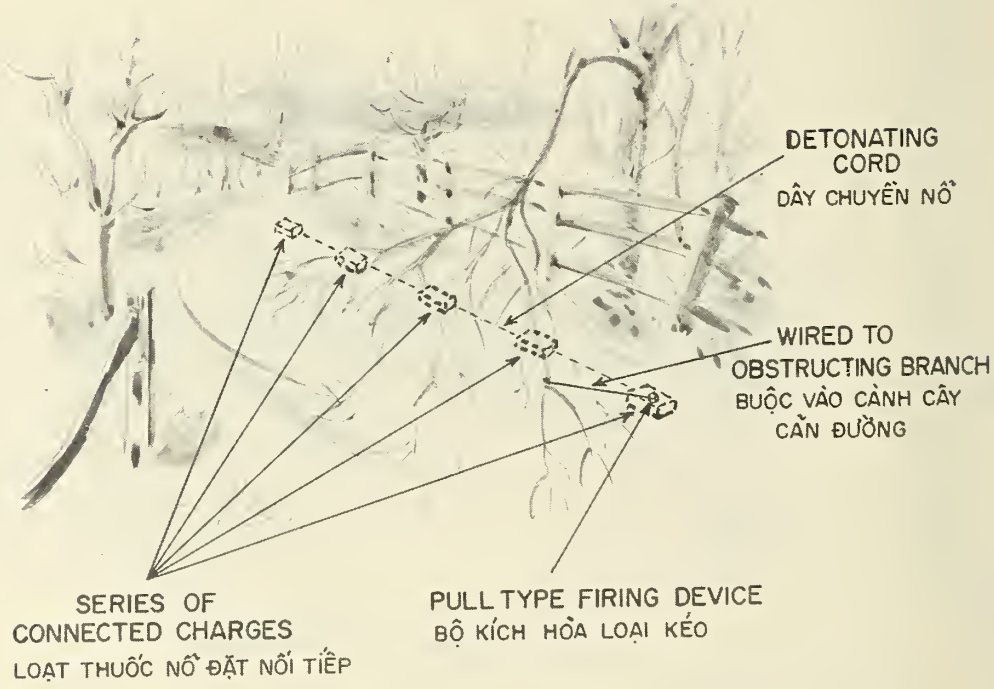


Figure 22
Hình 22

WHEEL-TRACK BOOBYTRAP

BẪY NỔ GÀI XE CHẠY BÁNH

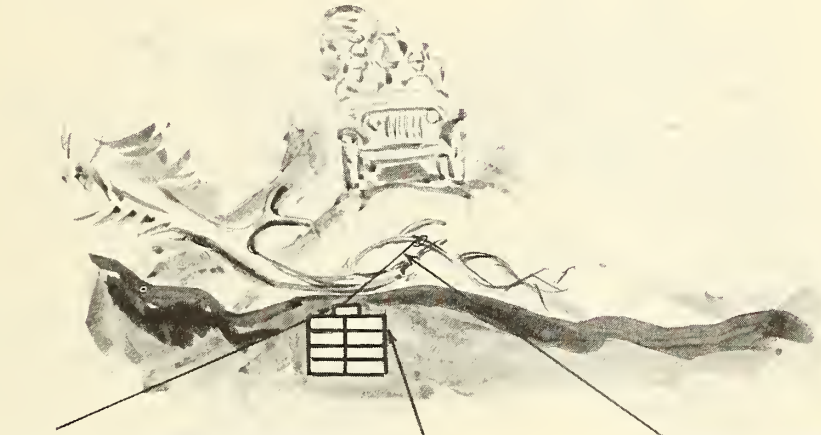


Figure 23
Hình 23

BOOBYTRAPPING SUPPLIES
BẪY NỔ GÀI VÀO TIẾP PHẨM

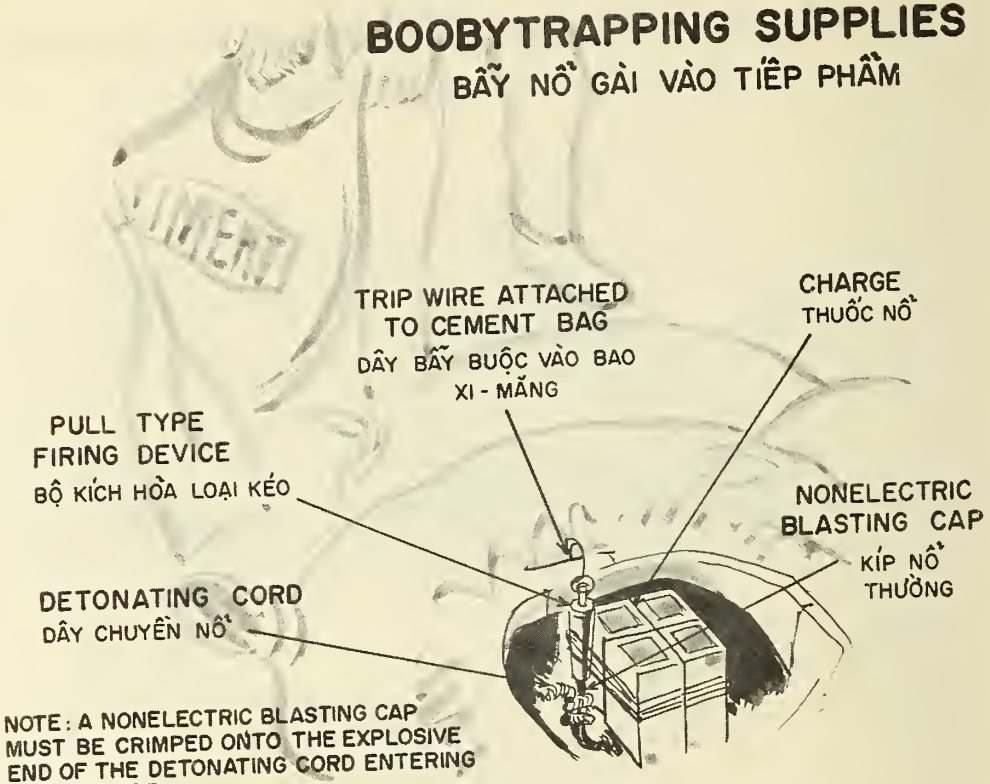
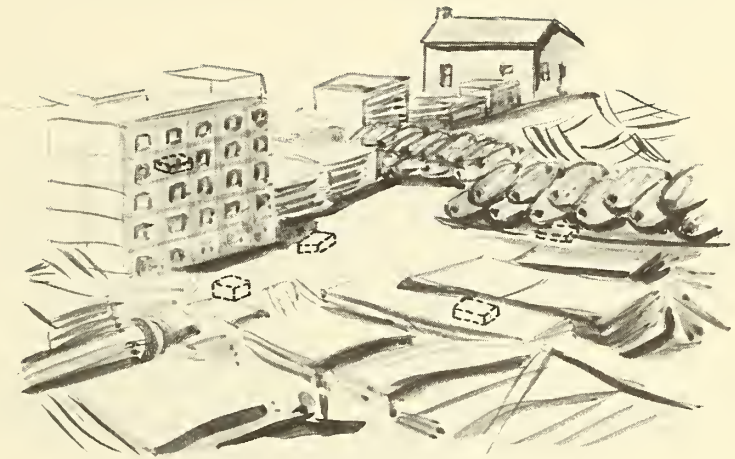


Figure 24
Hình 24



BOOBYTRAPPING AN AMMUNITION DUMP

BẪY NỔ GÀI VÀO KHO ĐẠN DƯỢC

Figure 25
Hình 25

SUPPLY DUMP BOOBYTRAP

BẪY NỔ GÀI VÀO KHO TIẾP LIỆU

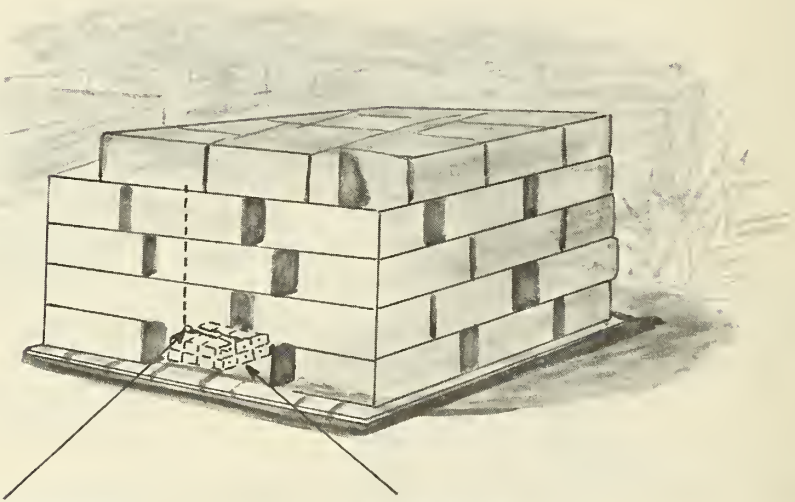


Figure 26
Hình 26

4. GENERAL PRECAUTIONS.

a. Do not be in too much of a hurry, if at all possible. As the name "boobytraps" implies, they are used to catch the careless soldier.

b. When sweeping an area, remember that both explosive and non-explosive boobytraps may be employed with mines.

c. Be suspicious of all objects that appear to be loose. When checking captured factories, supply dumps, or materiel watch for boobytraps.

d. Before cutting taut trip wires check both ends for boobytrapping. One end may be attached to a tension release device. Before disturbing any object check it for wires and pressure release devices.

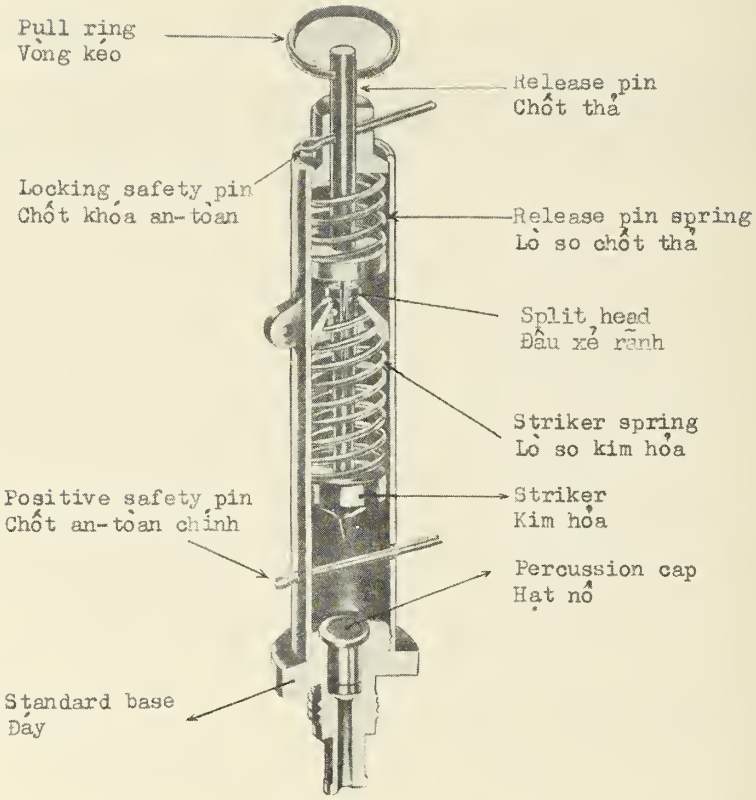
e. If you find explosive boobytraps, destroy them in place or mark them and leave them alone. Unless it is absolutely necessary for you to move them, let explosive ordnance disposal personnel take care of removal and disposal.

f. Do not take anything for granted. An object may appear to be innocent, but if it is found in suspicious circumstances, expect a trap.

g. Boobytraps are dangerous, effective weapons, but if you show a healthy respect for them and handle them properly you should not be a casualty.

V. SPECIFIC FUZES, MINES, AND BOOBYTRAPS.

This section is intended to provide a means of identifying specific mines and boobytraps and to cover some basic disarming procedures. Further information on U.S. firing devices and mines is given in TM 9-1345-200.


Pull ring
Vòng kéo
Release pin
Chốt thả
Locking safety pin
Chốt khóa an-toàn
Release pin spring
Lò so chốt thả
Split head
Đầu xẻ rãnh
Striker spring
Lò so kim hỏa
Positive safety pin
Chốt an-toàn chính
Striker
Kim hỏa
Percussion cap
Hạt nổ
Standard base
Đáy

U.S. FIRING DEVICE, PULL TYPE, M1

This firing device has been employed by friendly forces and is in the hands of the VC. It is especially useful in antipersonnel mines and booby-traps.

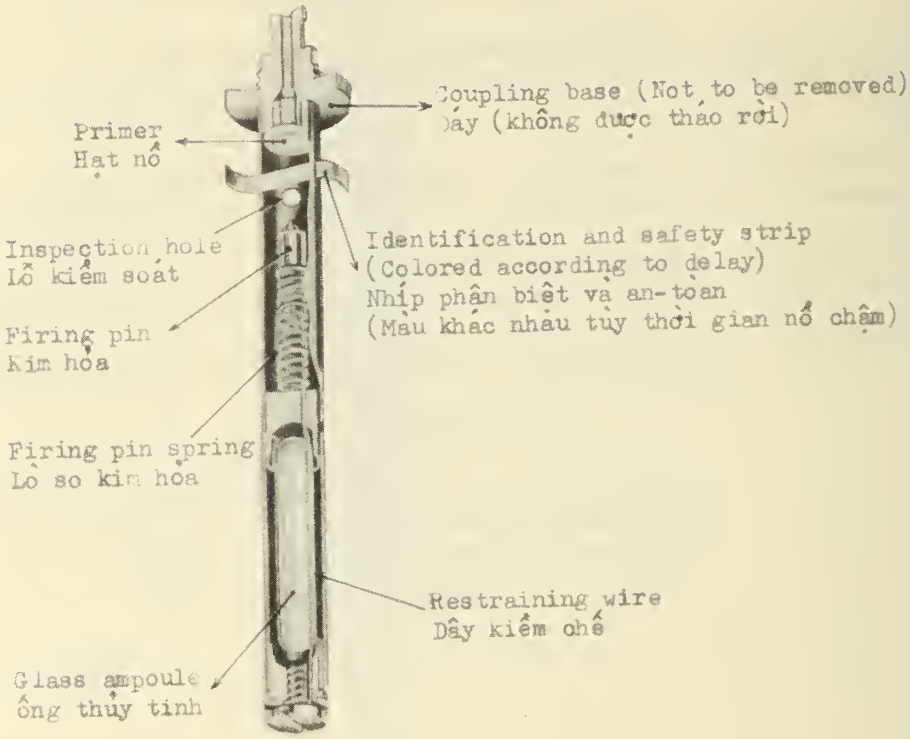
FUNCTIONING. A pull on the ring causes the split head of the striker to compress and to be released. This action fires the device.

DISARMING. Insert the positive and locking safety pins. Disconnect any trip wires. Unscrew the base for destruction or safe storage.

CAUTION. Do not attempt to remove the detonator from the base.

CHARACTERISTICS

Type	Pull
Operating Pull	1.35-2.30 kg (3-5 pounds)
Material of Case	Metal
Color	OD


Coupling base (Not to be removed)
Đáy (không được tháo rời)
Primer
Hạt nổ
Inspection hole
Lỗ kiểm soát
Identification and safety strip
(Colored according to delay)
Nhíp phân biệt và an-toàn
(Màu khác nhau tùy thời gian nổ chậm)
Firing pin
Kim hỏa
Firing pin spring
Lò so kim hỏa
Restraining wire
Dây kiềm chế
Glass ampoule
ống thủy tinh

U.S. FIRING DEVICE, DELAY TYPE, M1

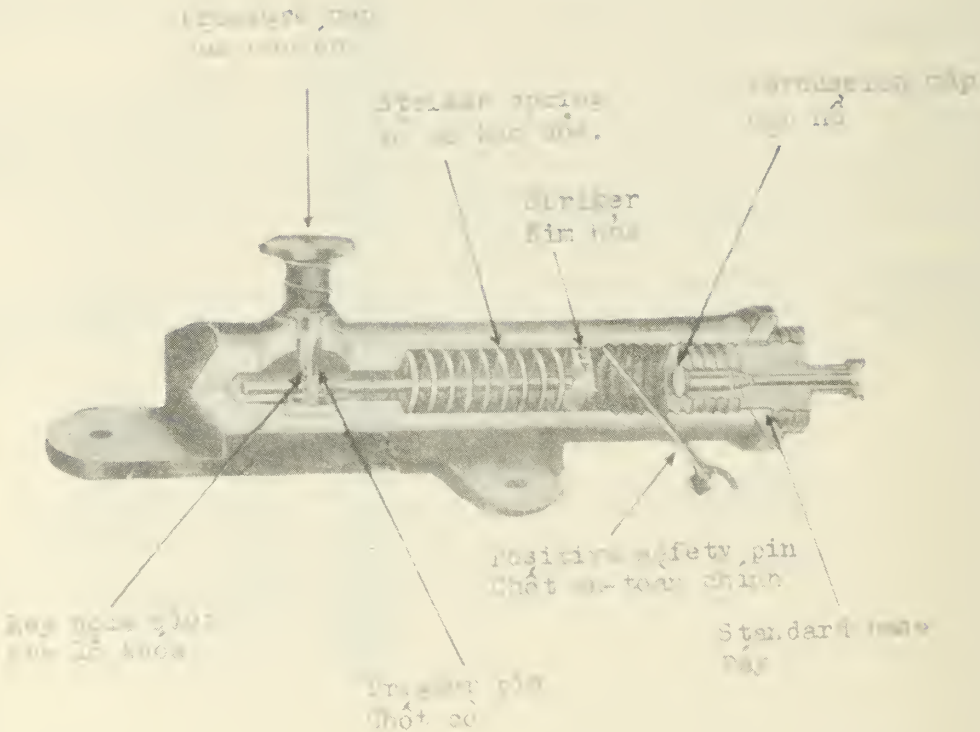
This firing device is employed in this theatre by the RVNAF and may be in the hands of the VC.

FUNCTIONING. A pressure of 2.30 kg (5 pounds) or more will crush the glass vial of acid that is contained inside the fuze. The acid eats away the restraining wire, causing the striker to hit and detonate the percussion cap. The color of the safety strip indicates the time of delay. The device may have a 4 minute to 9 day delay.

DISARMING. There is no safe way to disarm this device. If absolutely necessary, insert a safety pin or nail through the inspection holes and destroy in place or call explosive ordnance disposal personnel for assistance.

CHARACTERISTICS

Type.....	Chemical delay
Material of Case.....	Upper half-Copper Lower half-Brass
Color.....	Unpainted except for safety tab.


Striker
Kim hóa
Positive safety pin
Chốt an-toàn chính
Standard base
Đáy
Chốt cò

U.S. FIRING DEVICE, PRESSURE TYPE, M1A1

The M1A1 has been frequently used by RVNAF and may also be in the hands of the VC. It may be used to detonate antipersonnel mines and other explosive charges, including boobytraps.

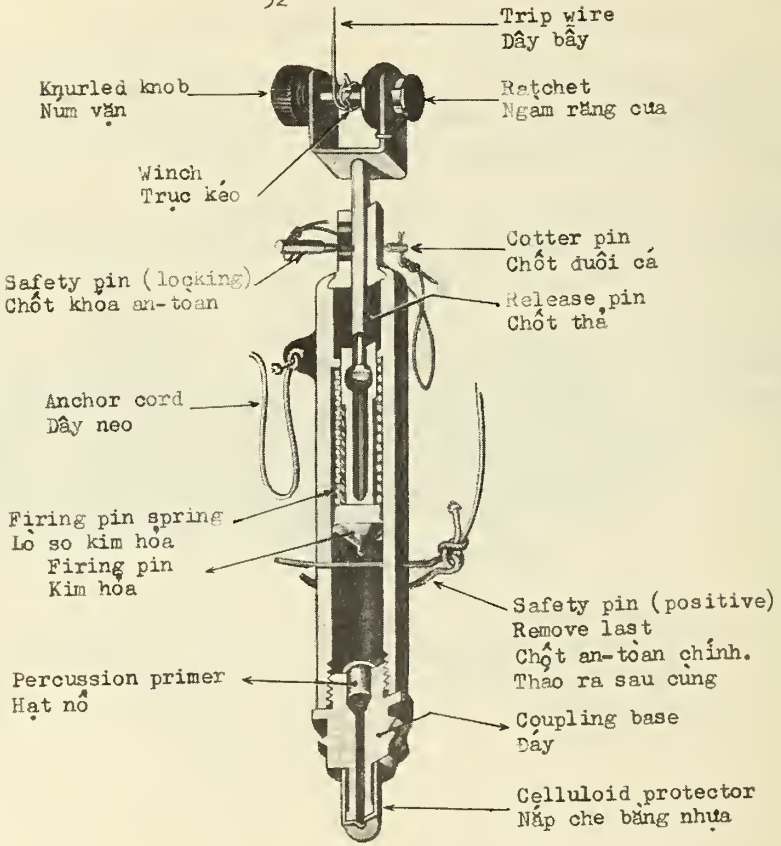
FUNCTIONING. A pressure of 9.20 kg (20 pounds) or more on the pressure cap depresses the trigger spring, which causes the trigger pin to move into the barrel of the device. This action releases the striker and fires the device.

DISARMING. Place the safety pin or a nail in the positive safety pinhole. If a safety clip is available, replace it. The device will not fire as long as the positive safety pin is in. Unscrew the base for destruction or safe storage.

CAUTION. Do not attempt to remove the detonator from the base.

CHARACTERISTICS

Type.....	Pressure
Operating Pressure.....	9.20 kg (20 pounds)
Material of Case.....	Metal
Color.....	OD


Trip wire
Dây bẫy
Knurled knob
Núm vặn
Ratchet
Ngam răng cưa
Winch
Trục kéo
Cotter pin
Chốt đuôi cá
Safety pin (locking)
Chốt khoa an-toan
Release pin
Chốt thả
Anchor cord
Dây neo
Firing pin spring
Lò so kim hỏa
Firing pin
Kim hỏa
Safety pin (positive)
Remove last
Chốt an-toàn chính.
Thao ra sau cùng
Percussion primer
Hạt nổ
Coupling base
Đáy
Celluloid protector
Nắp che bằng nhựa

U.S. FIRING DEVICE, PULL-RELEASE TYPE, M3

This firing device is used by RVNAF in antipersonnel mines and booby-traps, and may be in the hands of the VC.

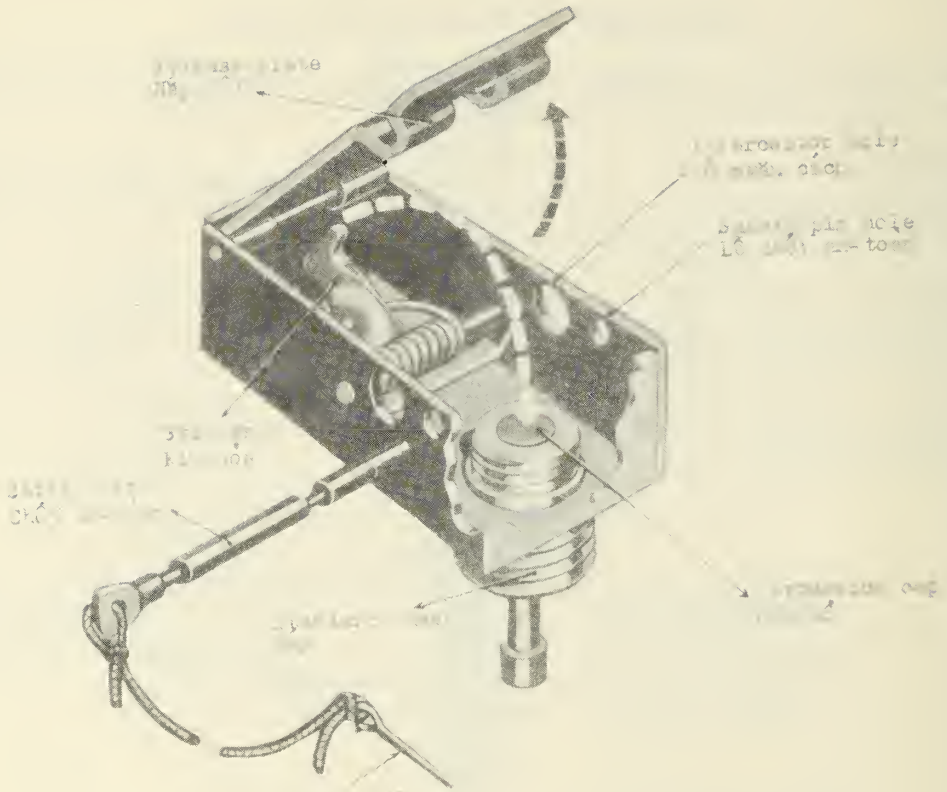
FUNCTIONING. A pull of 2.8 to 4.6 kg (6 to 10 pounds) on a trip wire, or a release of tension on a trip wire, allows the striker to become disengaged from the release pin to fire the device.

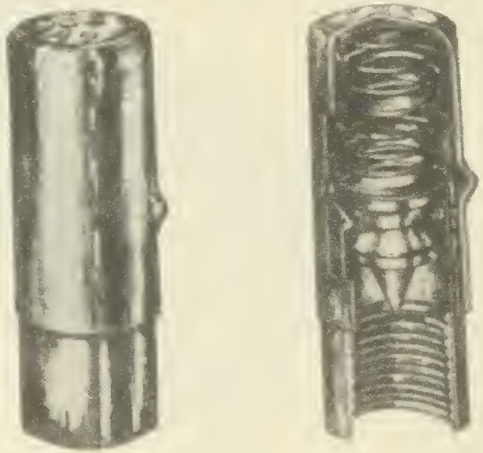
DISARMING. First insert the positive safety pin. Then insert the locking safety pin and remove the trip wire from the winch. Unscrew the base for safe storage or destruction.

CAUTION. DO NOT TOUCH TRIP WIRE!! Do not attempt to remove the detonator from the base.

CHARACTERISTICS

Type.....	Pull and tension release
Operating Pull.....	2.8 to 4.6 kg (6 to 10 pounds) or a release of tension
Material of Case.....	Metal
Color.....	OD





PRESSURE FUZE, MV - 5 (Soviet)
Đầu nổ loại nhận, MV-5 (Nga-sô)

SOVIET PRESSURE FUZE MV-5

The enemy in Korea made extensive use of this fuze in the TM-41 antitank mine and in the TMD-B Wooden Box Antitank mine. It may also be used in the TMB-1, TMB-2, and TMS-B mines. It may be available to the VC.

FUNCTIONING. A pressure of 10.1 kg (22 pounds) on the top of the fuze moves the pressure cap down to a position where the striker retaining ball moves into a recess at the side of the cap. This action releases the spring loaded striker which fires the fuze.

DISARMING. Remove the fuze from the mine and unscrew the base with the detonator.

CAUTION. The detonator is extremely sensitive to pressure and heat, so care must be exercised in removing and handling it. Do not attempt to remove the detonator from the base.

CHARACTERISTICS

Type.....	Pressure
Operating Pressure.....	10.1 kg (22 pounds)
Material of Case.....	Metal
Color.....	Varies

SOVIET PULL FUZE MUV

This simply constructed fuze has been frequently employed by the Communists, especially in improvised antipersonnel mines and boobytraps that are rigged with trip wires. It is also used in the POMZ-2, PMD-6, and YAM series mines.

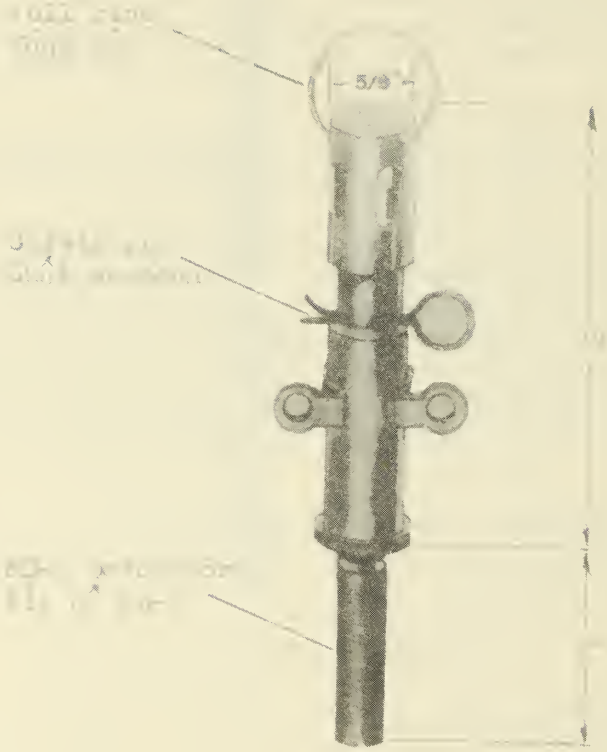
FUNCTIONING. A force of 0.9 kg (2 pounds) will remove the striker retaining pin and release the spring driven striker to fire the fuze.

DISARMING. Cut any slack trip wires that are attached to the eye of the striker retaining pin. Remove the fuze from the mine and unscrew the base with the detonator. This fuze also may be set with a taut trip wire attached to the upper hole of the striker with the striker retaining pin removed. The fuze will function when the trip wire is cut. In this case, insert a nail or wire in the exposed lower striker retaining pin hole, and then cut the taut trip wire. This fuze will function even though a nail or pin is in the upper hole.

CAUTION. The detonator is extremely sensitive to pressure and heat, and care must be exercised in removing and handling it. Do not attempt to remove the detonator from the base.

CHARACTERISTICS

Type.....	Pull or tension release
Operating pull.....	0.9 kg (2 pounds)
Material of Case.....	Metal, plastic, and rubber composition
Color.....	Varies


5/8"

SOVIET PULL FUZE VPF

This fuze was reportedly encountered on a few occasions in Korea. It is used in standard and improvised mines of all kinds, both on land and in the water. Its use by the Viet Cong should be anticipated.

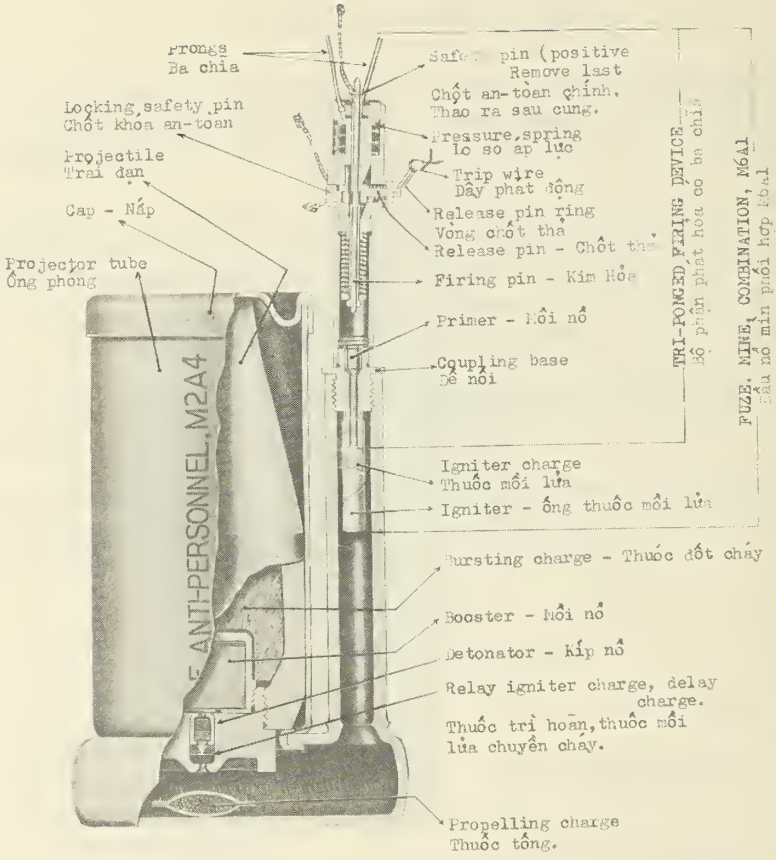
FUNCTIONING. This fuze is normally set to function by pull on the pull ring, but may be fitted with a rod projecting from the clamp top so that it will function by lateral pressure or pull on the rod. When either action occurs, the claw-like base of the clamp top releases the ball-shaped end of the striker, thus releasing the striker.

DISARMING. Carefully insert a nail or wire through the safety pin hole and then remove the fuze from the mine and unscrew the base with the detonator.

CAUTION. Due to the sensitivity of this fuze, extreme care must be used in handling. Do not force the parts. Do not attempt to remove the detonator from the base. It is recommended that mines fitted with this type of fuze be blown in place.

CHARACTERISTICS

Type.....	Pull (also lateral pressure on an extension rod)
Operating force.....	3.9-6.4 kg (8.5-14 pounds) pull or 1-1.6 kg (2.5-3.5 pounds) lateral pressure on extension rod
Material of Case.....	Metal
Color.....	Varies


Prongs
Ba chia
Safety pin (positive
Remove last
Chốt an-toàn chính.
Thao ra sau cùng.
Locking, safety pin
Chốt khoa an-toàn
Pressure, spring
Lo so áp lực
Projectile
Trái đạn
Trip wire
Dây phát động
Cap - Nắp
Release pin ring
Vòng chốt tha
Release pin - Chốt tha
Projector tube
Ống phóng
Firing pin - Kim Hỏa
Primer - Mồi nổ
Coupling base
Đế nối
TRI-PONGED FIRING DEVICE
Bộ phận phát hỏa ba chia
FUZE, MINE, COMBINATION, M6A1
Ngòi nổ mìn phối hợp M6A1
Igniter charge
Thuốc mồi lửa
Igniter - ống thuốc mồi lửa
Bursting charge - Thuốc đốt cháy
Booster - Mồi nổ
Detonator - Kíp nổ
Relay igniter charge, delay
charge.
Thuốc trì hoãn, thuốc mồi
lửa chuyển cháy.
Propelling charge
Thuốc tống.
ANTI-PERSONNEL, M2A4

US ANTIPERSONNEL MINE M2A4 WITH FUZE M6A1

This series of mines is of the "bounding" type. To obtain a more effective fragmentation pattern the burst charge contained in a projectile is projected several feet into the air by a propelling charge before it is exploded. It has a casualty radius of 10 meters and is dangerous to 150 meters. It is employed by burying and leaving the top of the fuze projecting above the ground. It may be fired by pressure or trip wire when used with the M6A1 fuze.

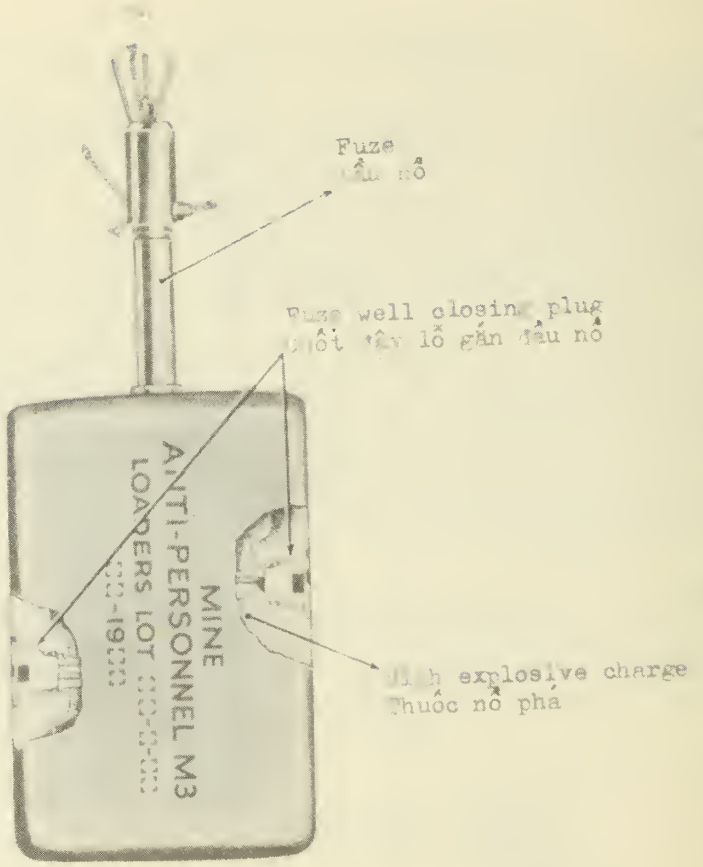
FUNCTIONING. A pressure of 3.7 to 9.2 kg (8 to 20 pounds) on one or more of the three prongs, or a pull of 1.4 to 4.6 kg (3 to 10 pounds) on a trip wire attached to the release pin, causes the release of the firing pin which strikes the primer and initiates the propelling and explosive charges. The shell is projected into the air, and the delay charge causes the explosive train to function, bursting the shell at a height of 2-3 meters.

DISARMING. Carefully inspect for boobytraps and uncover the mine to expose the safety pin hole and the locking pin hole. Insert the safety pins. Disconnect the trip wires. Remove the fuze from the mine.

CHARACTERISTICS

Weight	2.30 kg (5.01 pounds)
Weight of explosive	0.16 kg (.34 pounds) of TNT
Diameter	24.4 cm (9.63 inches)
Height	9.5 cm (3.75 inches)
Color	OD with yellow markings

MARINE CORPS UNIVERSITY LIBRARY


Fuze
Đầu nổ
Fuze well closing plug
Nút đậy lỗ gắn đầu nổ
MINE
ANTI-PERSONNEL M3
LOADERS LOT
h explosive charge
Thuốc nổ phá

U.S. ANTIPERSONNEL MINE M3 WITH FUZE M7A1

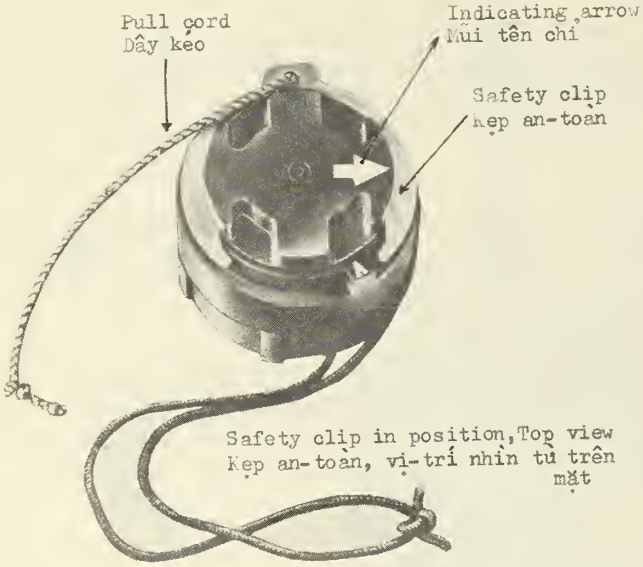
This is a fragmentation type mine. It consists of a high explosive charge in a heavy cast iron case. It is normally employed at the surface of the ground, but it may be employed above the ground for increased effect. This mine has three fuze wells permitting boobytrapping with a variety of fuzing arrangements. It is normally installed with the M7A1 fuze.

FUNCTIONING. A pressure of 3.68 to 9.20 kg (8 to 20 pounds) on any of the fuze prongs or a pull of 1.35 to 4.60 kg (3 to 10 pounds) on the release pin will release the firing pin which will strike the primer and initiate the explosive train.

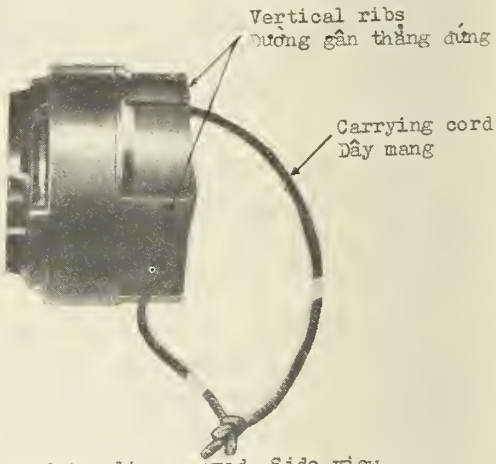
DISARMING. Carefully remove camouflage and dirt. This mine is very adaptable to boobytraps, so examine it carefully before beginning removal. Insert the firing pin safety pin (positive) first, and then insert the release pin safety pin (locking). Disconnect the wires. Remove the mine and remove the fuze or fuzes.

CHARACTERISTICS

Weight	5.1 kg (11 pounds)
Weight of explosive	0.41 kg (.90 pounds) of TNT
Width	8.9 cm (3.5 inches)
Height	22.1 cm (8.7 inches)
Color	OD with yellow markings



Safety clip in position, Top view
Kẹp an-toàn, vị-trí nhìn từ trên mặt



Safety clip removed, Side view
Chốt an-toàn đã tháo, nhìn bên hông

U.S. ANTIPERSONNEL MINE M14

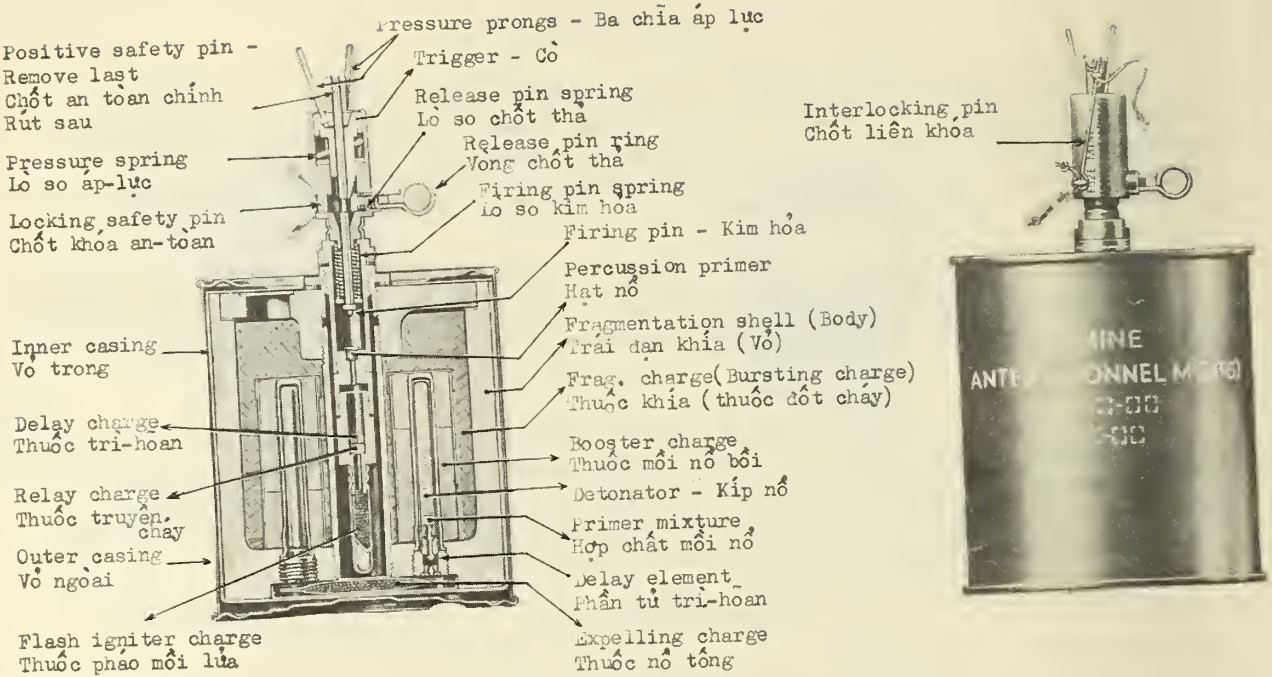
This plastic, pocket size M14 mine was designed to inflict injuries requiring prolonged hospitalization rather than to kill. The mine may be buried in roads, footpaths, or other local avenues of approach for foot troops. Because of its plastic construction, the M14 is extremely difficult to detect by electronic means.

FUNCTIONING. A pressure of 9.20 to 16.1 kg (20 to 35 pounds) of pressure on the pressure plate causes a belleville spring to reverse itself and drive the firing pin into the detonator, causing it to fire, thus setting off the main charge.

DISARMING. Carefully uncover the concealed mine. Neutralize any booby-traps. Examine the sides and bottom of the mine for any evidence of activation, damage, or malfunctioning. If there is any evidence of damage or malfunctioning, do not attempt to neutralize the mine. Destroy it in place. Insert the safety clip in the slots in the pressure plate.

CHARACTERISTICS

Weight	0.1 kg (3.33 ounces)
Weight of explosive	0.03 kg (1 ounce) of tetryl
Diameter	5.7 cm (2.2 inches)
Height	4.4 cm (1.6 inches)
Color	OD with yellow markings


Pressure prongs - Ba chĩa áp lực
Positive safety pin - Remove last
Chốt an toàn chính Rút sau
Trigger - Cò
Release pin spring
Lò so chốt tha
Release pin ring
Vong chốt tha
Pressure spring
Lo so ap-lực
Firing pin spring
Lo so kim hoa
Locking safety pin
Chốt khóa an-toàn
Firing pin - Kim hỏa
Percussion primer
Hạt nổ
Fragmentation shell (Body)
Trái dạn khía (Vỏ)
Inner casing
Vỏ trong
Frag. charge(Bursting charge)
Thuốc khía (thuốc đốt cháy)
Delay charge
Thuốc trì-hoan
Booster charge
Thuốc mồi nổ bổi
Relay charge
Thuốc truyền chay
Detonator - Kíp nổ
Primer mixture
Hợp chất mồi nổ
Outer casing
Vỏ ngòai
Delay element
Phần tử trì-hoan
Flash igniter charge
Thuốc pháo mồi lửa
Expelling charge
Thuốc nổ tống
Interlocking pin
Chốt liên khóa

U.S. ANTIPERSONNEL MINE M16A1 WITH FUZE M605

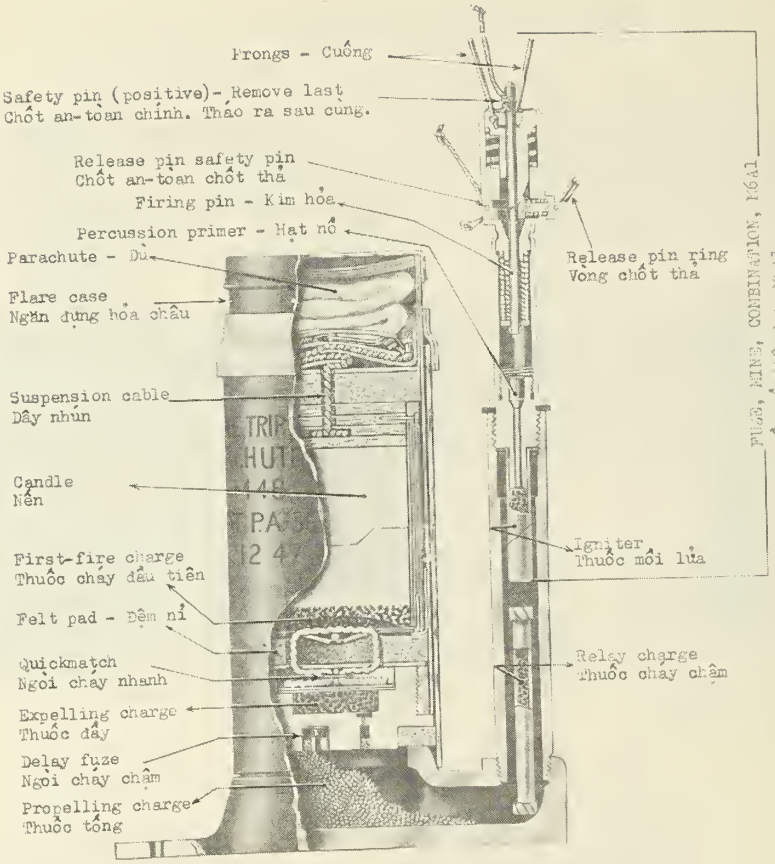
This mine is of the "bounding" type and functions in a manner similar to the mine M2A4 previously described. The mine has an explosive charge three times larger than the M2A4, with a resultant more effective fragmentation pattern and a larger effective radius. It is employed by burying, leaving only the top of the fuze projecting. It can be activated by pressure on a trip wire.

FUNCTIONING. A pressure of 3.7-9.2 kg (8 to 20 pounds) on any of the three prongs of the fuze, or a pull of 1.4-4.6 kg (3 to 10 pounds) on the release pin, causes the firing pin to strike the primer and initiate the propellant train. The mine propelling charge projects the cast iron shell straight up and ignites the two detonator delay charges. These charges explode the booster, which in turn explode the bursting charge at about 1-2 meters height.

DISARMING. Check for boobytraps. Carefully uncover the top of the mine and examine it for evidence of malfunctioning or damage from blast. If the mine is damaged, destroy it in place. Insert a pin into the positive safety pin hole first. Insert the safety pin or wire into the locking safety pin hole. Remove all trip wires. Lift the mine from the ground and remove the fuze.

CHARACTERISTICS

Weight	3.6 kg (7.9 pounds)
Weight of explosive	0.46 kg (1 pound) of TNT
Diameter	10.3 cm (4.1 inches)
Height	14 cm (5.5 inches)
Color	OD with yellow markings


Prongs - Cuống
Safety pin (positive) - Remove last
Chốt an-toàn chính. Tháo ra sau cùng.
Release pin safety pin
Chốt an-toàn chốt thả
Firing pin - Kim hỏa
Percussion primer - Hạt nổ
Parachute - Dù
Flare case
Ngăn đựng hỏa châu
Suspension cable
Dây nhún
Candle
Nến
First-fire charge
Thuốc cháy đầu tiên
Felt pad - Đệm nỉ
Quickmatch
Ngòi cháy nhanh
Expelling charge
Thuốc đẩy
Delay fuze
Ngòi cháy chậm
Propelling charge
Thuốc tống
Release pin ring
Vòng chốt thả
Igniter
Thuốc mồi lửa
Relay charge
Thuốc cháy chậm
FUZE, MINE, COMBINATION, M6A1
Đầu nổ Liên hợp M6A1

U.S. TRIP FLARE M-48 WITH FUZE M6A1

Captured quantities of these items have been mistakenly used by the enemy as antipersonnel mines and boobytraps. The trip flare does have a use in AP mine fields when used as a warning device in the forward edges of the field, but it should not be used as an AP mine. Its similarity in appearance to the US M2A4 bounding AP mine is probably the reason for its misuse by the enemy.

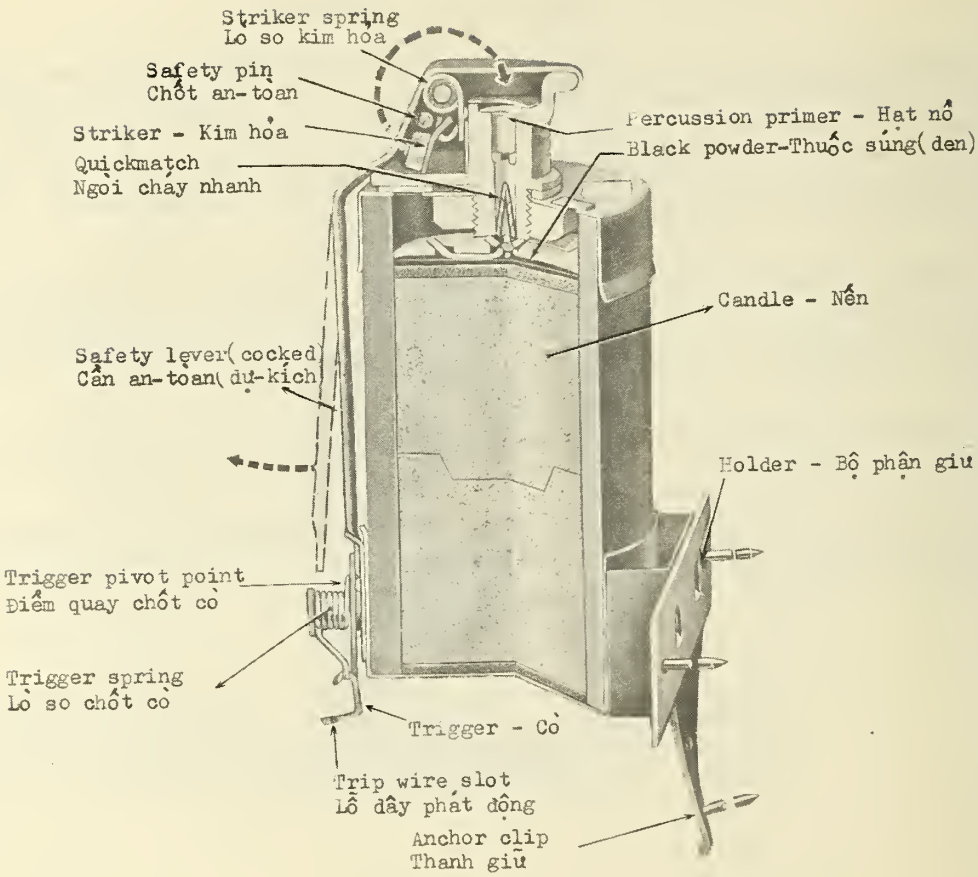
FUNCTIONING. The fuze is actuated by a pressure on the prongs or a pull on the pull ring. When this occurs, the cannister is propelled into the air to explode at a height of 90 to 150 meters. The burst releases a white parachute flare that burns for twenty seconds.

CAUTION. Although this is not an AP mine, serious burns can be caused by premature detonation.

DISARMING. Check for boobytraps. Insert safety pins, disconnect trip wires, and remove the fuze from the flare.

CHARACTERISTICS

Weight.....	2.3 kg (5.0 pounds)
Diameter.....	14 cm (5.5 inches)
Height.....	24.8 cm (9.75 inches)
Color.....	OD with yellow markings


Striker spring
Lo so kim hỏa
Safety pin
Chốt an-toan
Striker - Kim hỏa
Quickmatch
Ngòi chay nhanh
Percussion primer - Hạt nổ
Black powder-Thuốc súng(đen)
Candle - Nến
Safety lever(cocked)
Cần an-toan(dự-kích)
Holder - Bộ phận giữ
Trigger pivot point
Điểm quay chốt cò
Trigger spring
Lò so chốt cò
Trigger - Cò
Trip wire slot
Lỗ dây phát động
Anchor clip
Thanh giữ

U.S. TRIP FLARE M-49 WITH FUZE M12

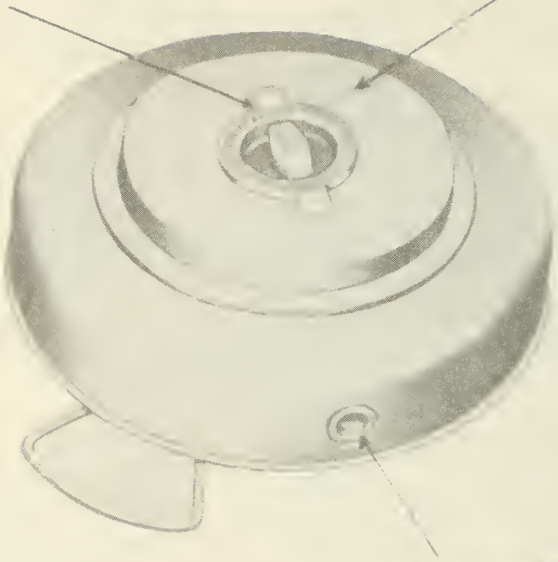
This flare is used as a warning device in forward edges of mine fields. When set off, the flare illuminates the area so that effective fire can be brought to bear on the intruders. The VC often mistake these flares for hand grenades.

FUNCTIONING. A taut wire holds the trigger in an armed position (vertical) against the pressure of the trigger spring. An additional pull of .9 to 4.1 kg (2 to 9 pounds), or a release of tension on the trip wire, allows the trigger to release the lever. The released lever permits the striker to hit the percussion cap and to set off the flare.

DISARMING. Press in on the lever and insert a pin. Remove the trip wire, allowing the trigger to pivot to the unarmed position. The flare is now safe to be moved.

CHARACTERISTICS

Weight.....	0.69 kg (1.5 pounds)
Diameter.....	7.62 cm (3.0 inches)
Height.....	17.35 cm (6.75 inches)
Color.....	OD with yellow markings



U.S. AT MINE M6A2 WITH FUZE M603

This mine consists of a TNT loaded body with an M603 fuze, a booster, and an arming plug. There are two secondary wells which makes this mine very adaptable to boobytraps. It is employed by burying just below the ground surface.

FUNCTIONING. When the arming plug is in the armed position, a force of 138 to 184 kg (300 to 400 pounds) on the pressure plate depresses the belleville spring of the mine, resulting in the belleville spring of the fuze being depressed. This spring snaps into reverse, driving the firing pin into the detonator, thus initiating the explosive train.

DISARMING. Carefully uncover the concealed mine, examining for boobytraps. Examine the bottom and side secondary wells for boobytrapping. Replace all safety pins in secondary firing devices, if any. Remove trip wires, checking for other boobytraps. Turn the arming plug to SAFE and remove it. Remove the fuze and replace the safety clips. If the fuze is frozen destroy the mine in place or notify explosive ordnance disposal personnel.

CHARACTERISTICS

Weight.....	9.2 kg (20 pounds)
Weight of explosive.....	5.5 kg (12 pounds) of TNT
Diameter.....	33 cm (13.12 inches)
Height.....	8.25 cm (3.25 inches)
Color.....	OD with yellow markings

U.S ANTITANK MINE M7A2 WITH FUZE M603

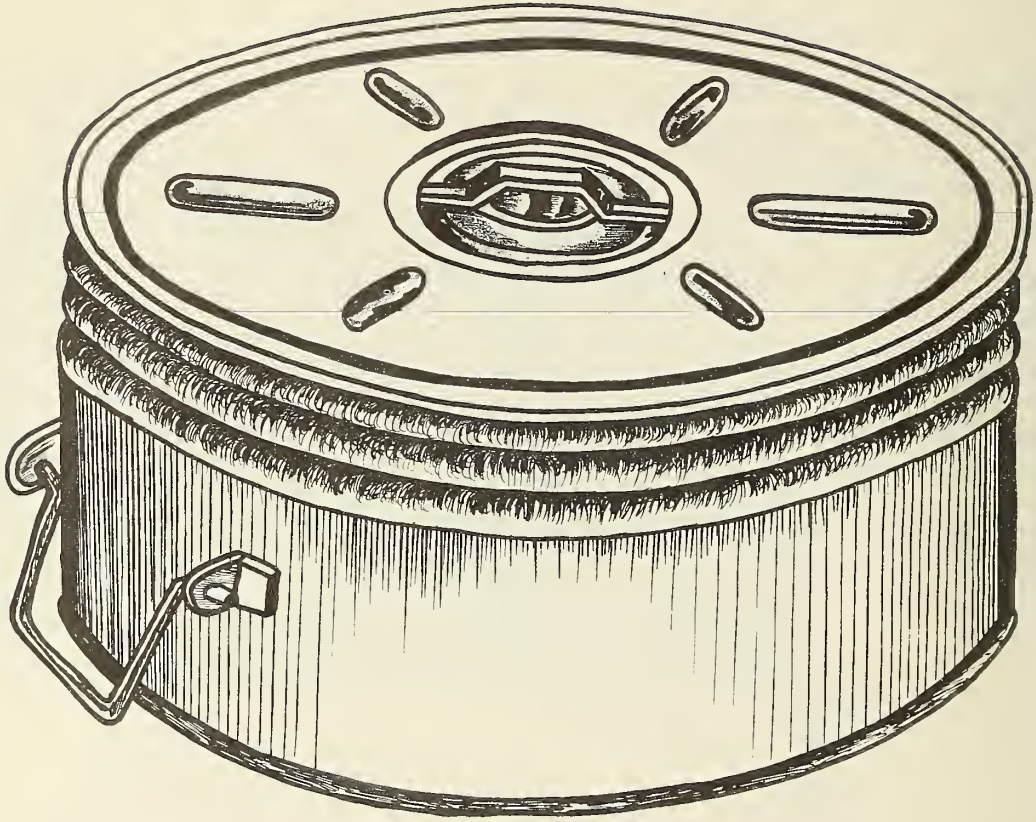
The mine consists of an explosive charge in a quart size, rectangular, light steel container intended for use against trucks and light tanks. It may be also used as an antipersonnel mine or as a demolition charge. It contains a secondary fuze well and is easily boobytrapped. It is armed by sliding a moveable pressure plate over the fuze.

FUNCTIONING. A force of 63 to 109 kg (140 to 240 pounds) on the mine pressure plate depresses the pressure plate of the fuze. The belleville spring of the fuze snaps into reverse and drives the firing pin into the detonator, thus initiating the explosive train.

DISARMING. Carefully uncover the mine and check for boobytraps. Insert a positive safety pin into the secondary fuze, if present. Remove all trip wires. Slide the mine pressure plate from its position over the fuze. Remove the fuze. If the fuze is frozen, destroy the mine in place or notify explosive ordnance disposal personnel.

CHARACTERISTICS

Weight	2.2 kg (4.88 pounds)
Weight of explosive	1.6 kg (3.62 pounds) of tetrytol
Length	17.8 cm (7 inches)
Width	11.4 cm (4.5 inches)
Height	6.4 cm (2.5 inches)
Color	OD with yellow markings



SOVIET ANTITANK MINE TM-41

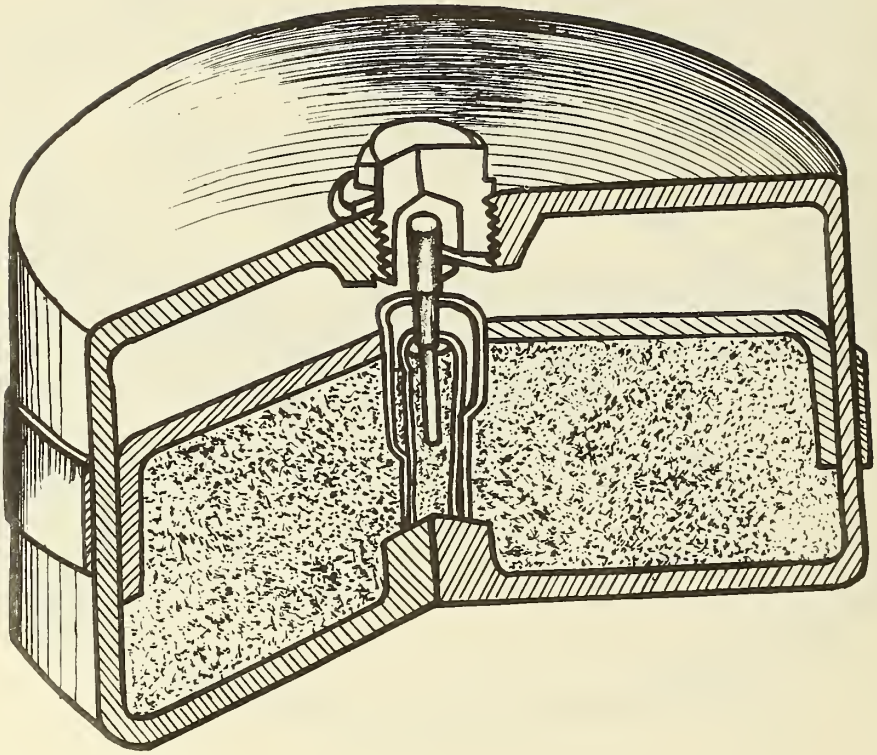
This mine is made of blued steel metal, often painted white or dark OD. This is a pressure type mine and is employed slightly beneath the surface of the ground. It can remain operational for many months when it is water proofed.

FUNCTIONING. A force of 161 kg (350 pounds) pressure on the lid of the mine case will activate the pressure type firing devices beneath the pressure cap.

DISARMING. Check for boobytraps. Unscrew the pressure cap. Gently pull out the fuze with its attached detonator. A blasting cap is attached to this fuze.

CHARACTERISTICS

Weight.....	5.5 kg (12 pounds)
Weight of explosive.....	3.6 kg (8 pounds)
Height.....	13.3 cm (5.2 inches)
Diameter.....	25.4 cm (10 inches)

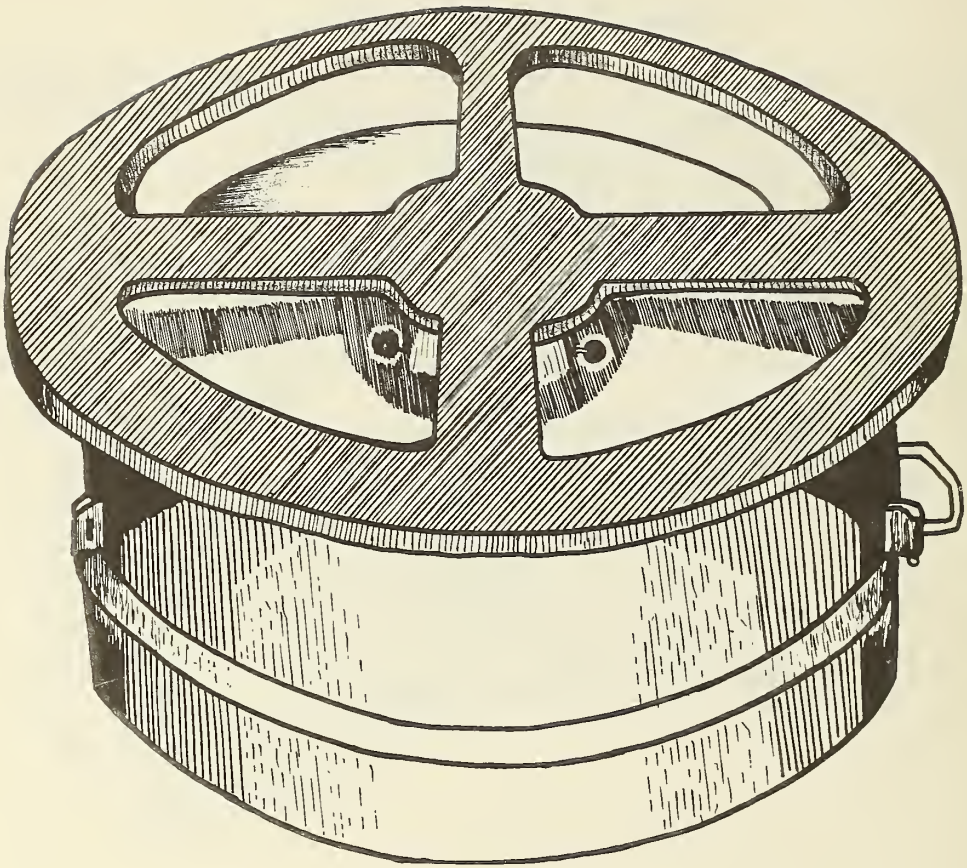


SOVIET ANTITANK MINE TMB-2

This mine is of the Soviet standard type of non-metallic antitank mine. It is laid separately or together with metallic and wooden mines. It cannot be detected by a mine detector.

CHARACTERISTICS

Mine Case.....	Tar impregnated cardboard
Color.....	Black or Brown
Height.....	15.3 cm (6 inches)
Diameter.....	27.5 cm (10-3/4 inches)
Weight.....	7 kg (15.4 pounds)
Weight of explosive.....	4.9 kg (11 pounds) of amatol



CHICOM ANTIPERSONNEL AND ANTITANK MINE NUMBER 8

Some of these mines were located in Korea, but their use was limited. The use of this mine in Vietnam should be anticipated.

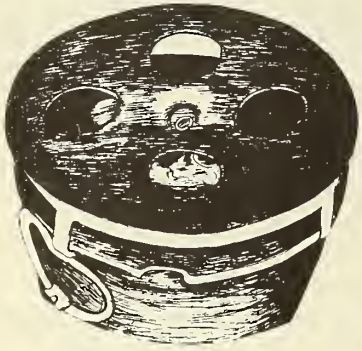
FUNCTIONING. Approximately 138 kg (300 pounds) of pressure on the center of the spider (less pressure if applied to the edge of the spider) causes the igniter to function and the mine to detonate. The fuze of this mine can also be fired by a pull of 4.6 to 23.0 kg (10 to 50 pounds) on the spider. Extreme caution should be exercised if the mine is lifted for removal.

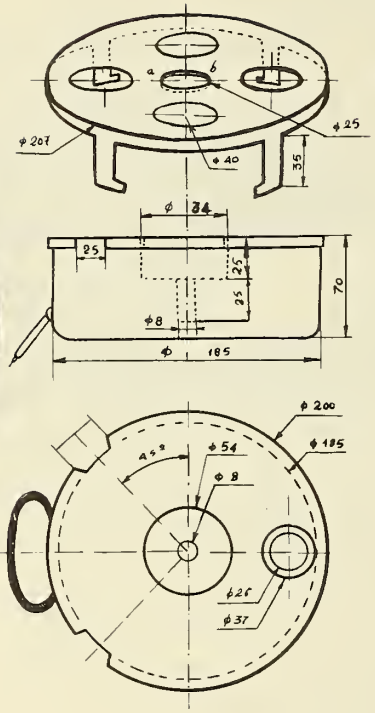
DISARMING. Check for boobytraps. Cut any slack trip wires that are connected to the mine. Insert the safety bar into the slot on the side of the fuze. If the bar is not available, carefully remove the spider and unscrew the fuze.

CAUTION. It is extremely hazardous to remove these mines. It is recommended that whenever possible, they be destroyed in place or explosive ordnance disposal personnel be notified.

CHARACTERISTICS

Weight.....	5.4 kg (12 pounds)
Weight of explosive.....	2.3 kg (5 pounds)
Diameter.....	228.6 mm (9 inches)
Height.....	101.6 mm (4 inches)




ϕ 207
ϕ 40
ϕ 25
35
ϕ 84
25
25
25
25
70
ϕ8
ϕ 185
ϕ 200
ϕ 185
45°
ϕ 54
ϕ 8
ϕ 25
ϕ 37
cu ab
ϕ 25
ϕ 41
2
9
35
71
25
ϕ 6

CHICOM ANTITANK MINE

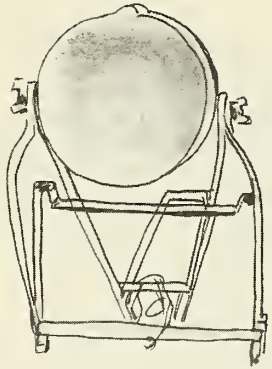
This antitank mine is supplied to the VC by the Chinese Communists. It is similar to a pre World-War II American mine and is often mistaken for this mine. The mine has stenciled on the top "MINE M1A1 - TNT" in yellow.

FUNCTIONING. Approximately 92 kg (200 pounds) of pressure on the pressure plate will cause the shear pin in the fuze to shear off and allow the firing pin to strike the primer, causing detonation of the mine.

DISARMING. Remove all soil from around the mine prior to defuzing. Rotate the pressure plate until the fingers disengage the mine body. Carefully lift the pressure plate out of the way. Remove the fuze by lifting it out of the fuze well. Replace the safety fork if present.

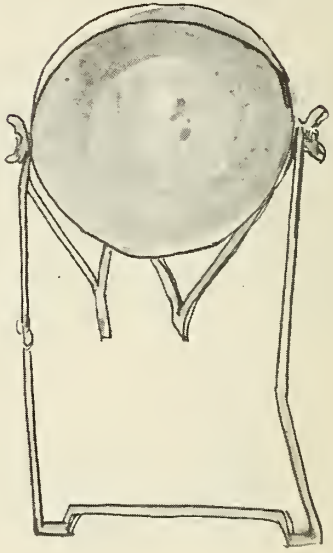
CHARACTERISTICS

Color	OD with yellow markings
Weight	5.3 kg (11.5 pounds)
Diameter	20.3 cm (8 inches)
Height	7.6 cm (3 inches)
Filler	TNT



5.5 KG

6.9 KG



9.2 KG

VC FIXED DIRECTIONAL FRAGMENTATION MINE (DH-10)

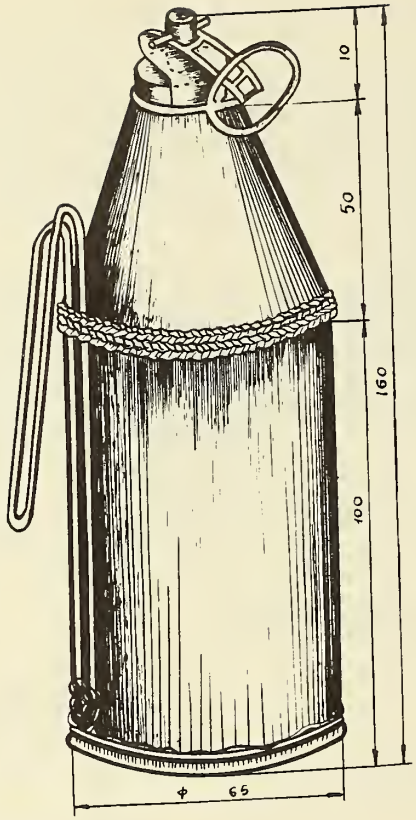
The DH-10 mine has characteristics similar to the US M-18 "Claymore". The DH-10 is designed as an antipersonnel weapon and may be used in ambushes, against massed infantry attacks, against light armored vehicles, and against helicopters during the landing of troops. The mine stand is so constructed that the mine can be rotated on its axis and aimed in the direction of the target.

FUNCTIONING. The DH-10 is placed and aimed in the direction of the target. An electrical detonator is located in the fuze well in the front or rear center of the mine. Wires from the detonator are connected to a battery pack or hand held generator located a safe distance from the mine. Although the DH-10 is designed for electrical operation, it would be very simple to incorporate a mechanical fuze.

DISARMING. Cut the electrical leads, one at a time, approximately 15 cm (6 inches) from the mine body. Remove the detonator.

CHARACTERISTICS

Diameter.....	20, 24.1, 28.6 cm (7, 9, 11.75 inches)
Weight.....	5.5, 6.9, 9.2 kg (12, 15, 20 pounds)
Weight of explosive.....	1.8, 2.8, 3.7 kg (4, 6, 8 pounds)
Filler.....	TNT
Range.....	150-200 meters
Operation.....	Electrical


10
50
160
100
φ 65

VC ANTIPERSONNEL MINE

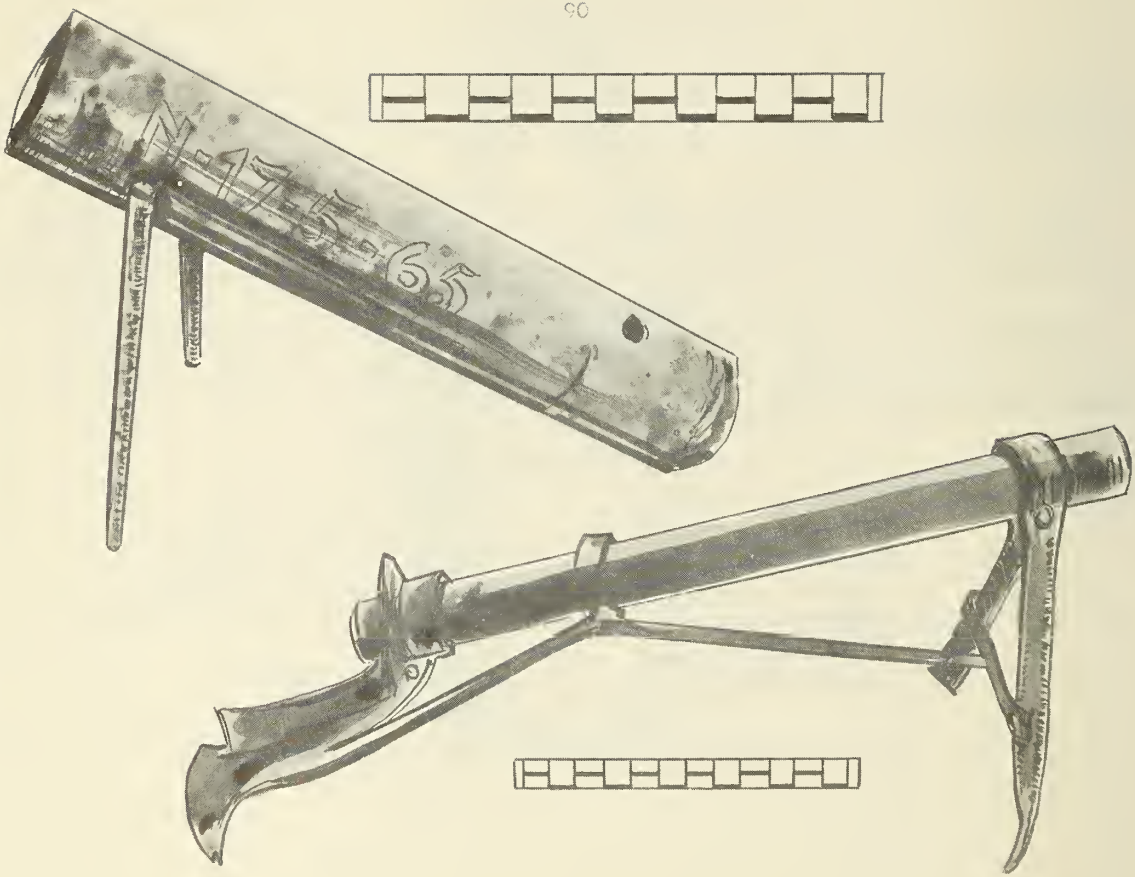
This type of mine is constructed of a sheet metal container similar to a beer can and employs a standard percussion grenade fuze. The fuze usually contains no delay.

FUNCTIONING. A trip wire is attached to the pull ring on the grenade fuze. When the pull pin attached to the pull ring is removed, the striker moves downward, hitting the primer, resulting in the detonation of the mine.

DISARMING. No attempt should be made to disarm this mine due to the possibility of a hang fire. Destroy the mine in place or notify explosive ordnance disposal personnel.

CHARACTERISTICS

Color	Gray or Green
Weight	0.9 kg (2 pounds)
Height	15.4 cm (6 inches)
Diameter	5-7.7 cm (2-3 inches)
Filler	TNT
Construction	Sheet metal

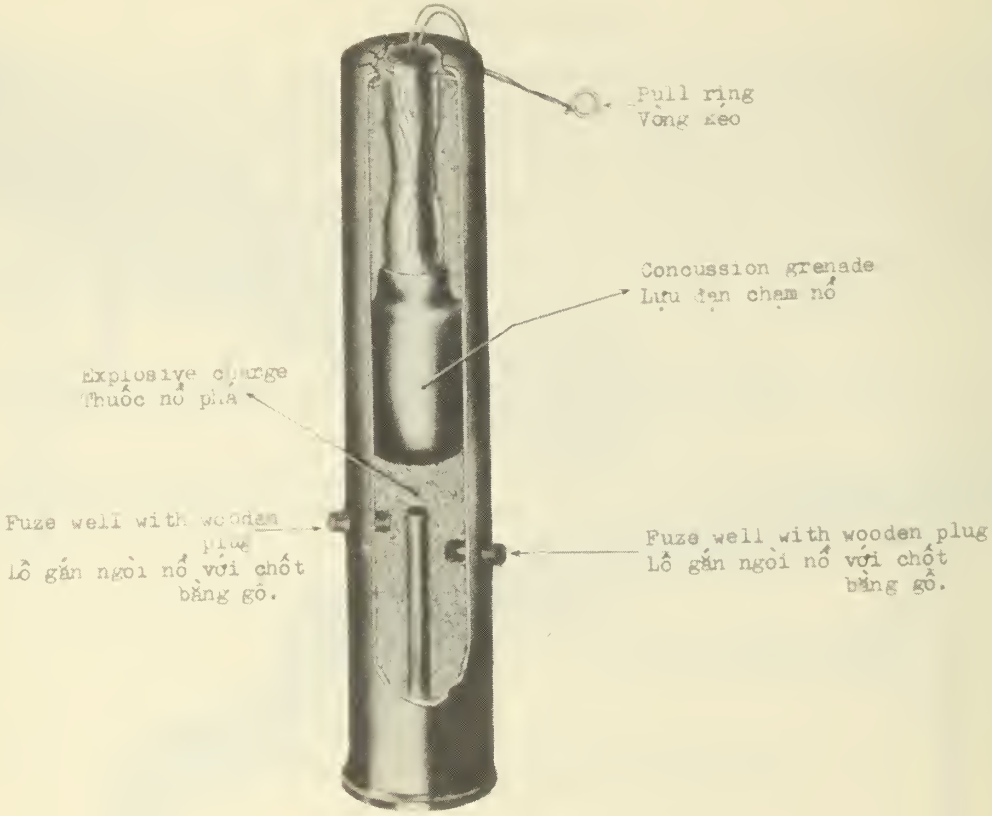

N-175-65

VC SKYHORSE

This is an improvised antipersonnel weapon, made from a piece of 5.1 cm (2 inch) pipe 32-96 cm (1 to 3 feet) long and closed at one end. An explosive charge is placed in the barrel followed by an assortment of articles such as rocks, nails, glass, or barbed wire, after which the end of the pipe is sealed with wax and emplaced for firing. It has a simple mousetrap actuator on the exterior which may be fired with a lanyard or a trip wire. This weapon may be employed to cover any trail, road, or other route troops may take. It is rigged so the VC can pull a lanyard or, more commonly, with a trip wire so the victim actuates it himself.

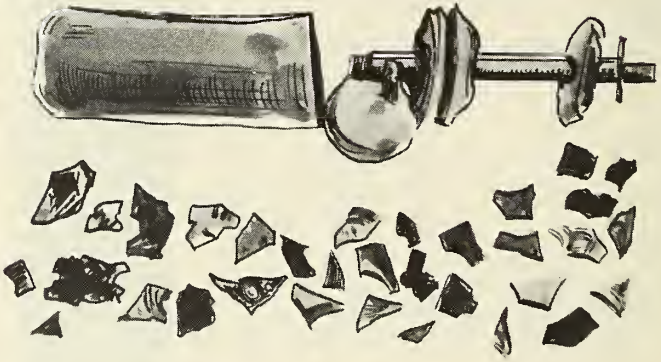
FUNCTIONING. When the retainer is pulled, the actuator striker hits the detonator which explodes.

DISARMING. When disarming this device, tie the actuator arm down with tape or wire. Place a piece of tape over the detonator to prevent accidental firing. Always check for boobytraps.


Pull ring
Vòng kéo
Concussion grenade
Lựu đạn chạm nổ
Explosive charge
Thuốc nổ phá
Fuze well with wooden plug
Lỗ gắn ngòi nổ với chốt bằng gỗ.
Fuze well with wooden plug
Lỗ gắn ngòi nổ với chốt bằng gỗ.

VC MINE IMPROVISED FROM SHELL CASE

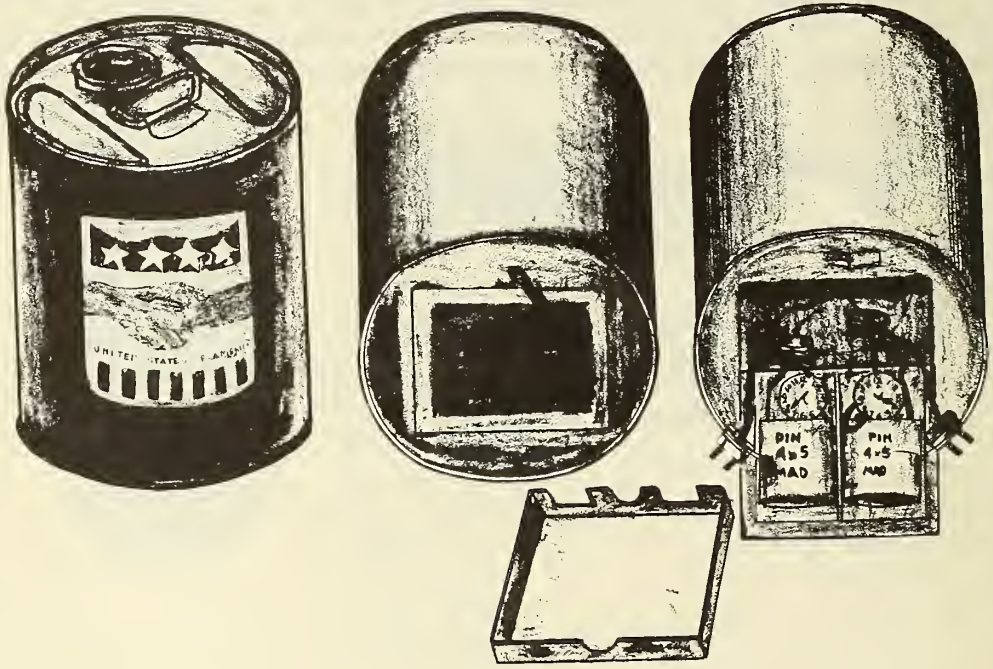
A 75-105mm cartridge case filled with explosive and one stick grenade for the primary detonator device comprise this improvised mine. Fuze wells have also been provided on the side of the shell casing; therefore, the improvised mine can be detonated by using any of the fuzes discussed in this booklet. The employment of these mines in most cases is against personnel.



VC "TOE POPPER" MINE

These mines are fabricated of cartridge cases or pieces of pipe of various sizes, loaded with "homemade" primers and a charge of black powder. When the victim steps on the mine the igniter explodes the charge and the "buckshot" projectiles are expelled with considerable force.

MÌN NỘI HÓA NỔ CHẬM ĐỒNG HỒ
(LOẠI THÙNG DẦU 5 GALLONS NẶNG 25 KÝ)



VC 5 GALLON OIL CAN TYPE MINE

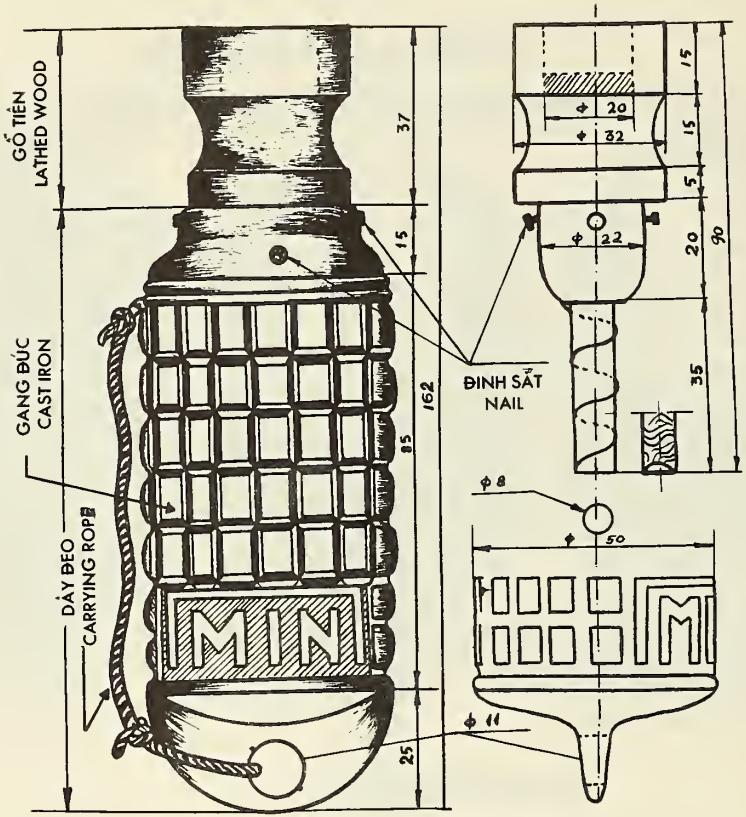
This is a locally manufactured mine using a 5 gallon oil can as the explosive container. The mine is usually employed with a watch or clock as the timing device.

FUNCTIONING. Two watches connected in series with a battery pack of 4.5 volts or larger capacity and to two electrical detonators, serve as the firing device. The minute and second hands of both watches have been cut short and small holes drilled through the crystals at the number 12. Brass screws are inserted in the drilled holes and wires are connected to them and to the battery. Other wires run from the battery to the detonators. The circuit is completed by attaching a third set of wires to the watch cases and to the detonators. The watches are wound and set to the selected time. When the hour hands touch the brass screws inserted through the crystals, the circuits are completed between the batteries and the electrical detonators. The 4.5 volts of the battery is applied to the bridge wires of the detonators, resulting in detonation of the mine.

DISARMING. Cut the wires, <u>one at a time</u> between the batteries and the watches, or between the watches and the electrical detonators. Remove the batteries and the timing device. Destroy the mine or notify explosive ordnance disposal personnel.

CHARACTERISTICS

Color	OD or Black
Type	Homemade
Operation	Electrical
Weight	10 kg (22 pounds)
Filler	TNT


GỖ TIỆN
LATHED WOOD
GANG BÚC
CAST IRON
DÂY ĐEO
CARRYING ROPE
ĐINH SẮT
NAIL
MIN
37
15
85
162
25
φ 11
φ 20
φ 32
φ 22
15
15
5
20
90
35
φ 8
φ 50

VC CYLINDRICAL CAST IRON FRAGMENTATION MINE

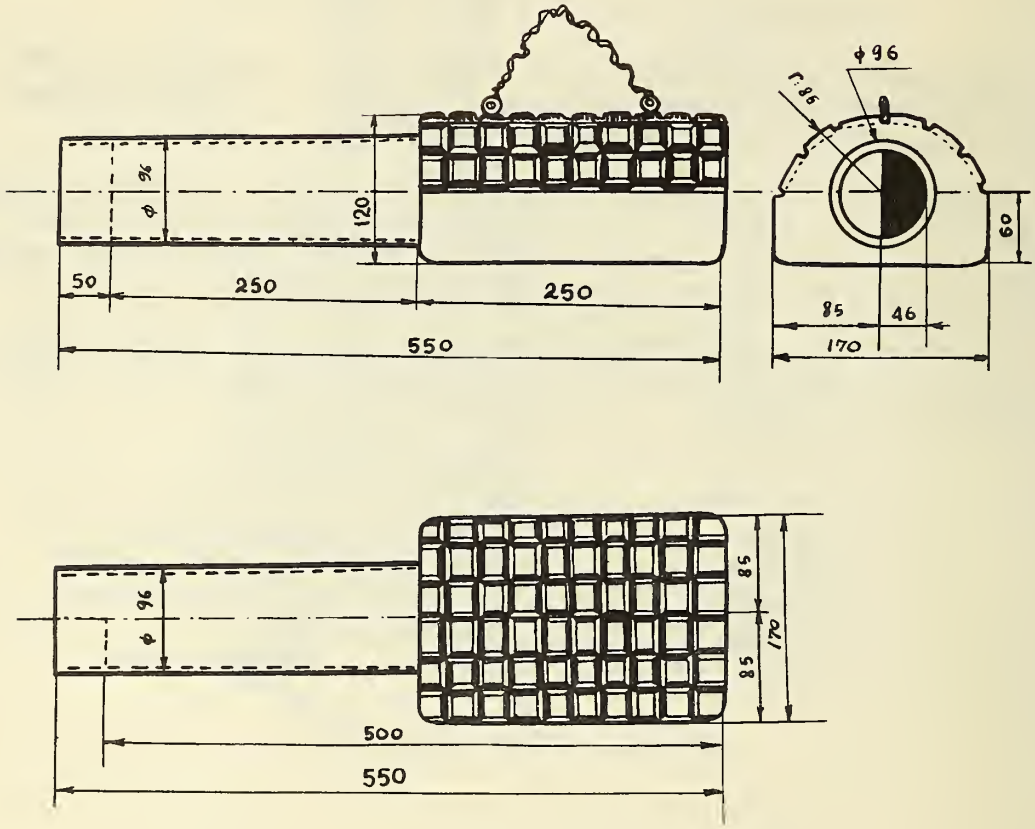
This mine is constructed of cast iron and is filled with cast TNT. The mine is similar to a stick grenade. It employs a friction igniter with a 4 second delay as the detonator device.

FUNCTIONING. A trip wire is attached to the pull wire of the friction igniter. Pressure applied to the trip wire will extract the pull wire through a match compound, igniting the delay element. Two to four seconds after extraction of the pull wire the mine will detonate.

DISARMING. If the pull wire is present, the mine is safe. If the pull wire is missing, the mine should be considered as a dud and treated accordingly.

CHARACTERISTICS

Color	Gray or Black
Weight	1 kg (2.2 pounds)
Diameter	5.1 cm (2 inches)
Filler	TNT
Operation	Friction pull


φ96
r.96
φ96
120
60
50
250
250
550
85
46
170
φ96
58
120
58
500
550

VC CYLINDRICAL CEMENT FRAGMENTATION MINE

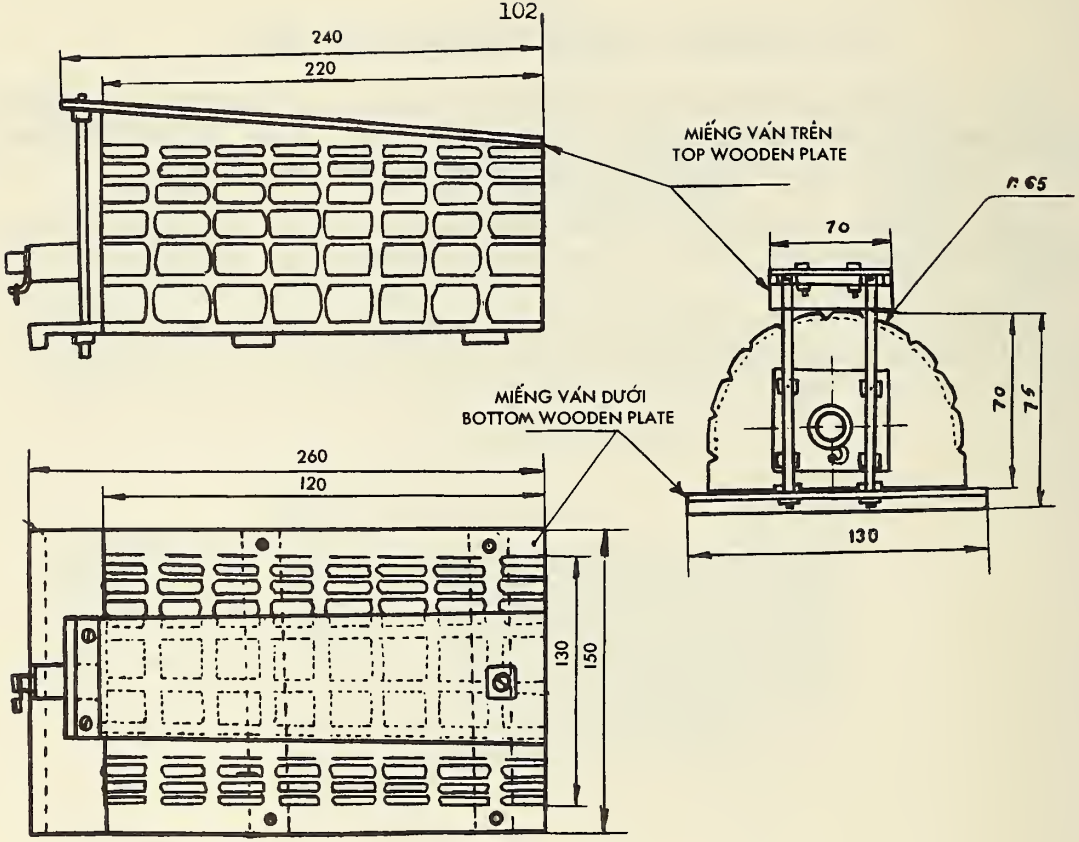
This locally manufactured cylindrical mine is constructed of cement. It incorporates a carrying handle fabricated of a 5.1 cm (2 inch) piece of pipe. The pipe also serves as the housing for the detonator.

FUNCTIONING. The mine is fuzed with an electrical detonator. It is usually fired remotely from a battery pack or hand held generator.

DISARMING. Cut the electrical leads, one at a time, approximately 15 cm (6 inches) from the body. Remove the detonators by lifting from the fuze wells. DO NOT force the detonators.

CHARACTERISTICS

Color	Gray
Weight	5.6 kg (13 pounds)
Length	25.4 cm (10 inches)
Height	12.7 cm (5 inches)
Filler	TNT
Construction	Iron pipe and cement


240
220
MIẾNG VÁN TRÊN
TOP WOODEN PLATE
R 65
70
70
75
MIẾNG VÁN DƯỚI
BOTTOM WOODEN PLATE
130
260
120
130
150

VC CEMENT "TURTLE" MINE

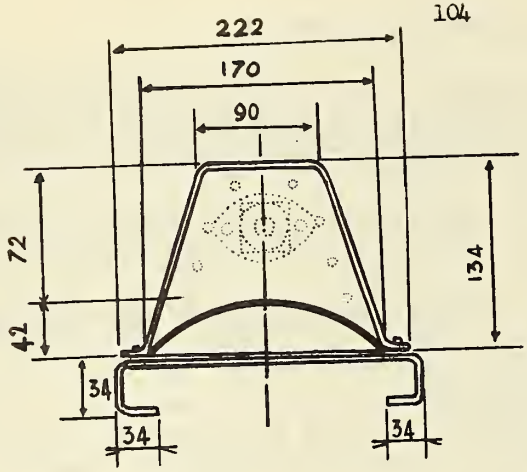
This is a locally manufactured mine with a body constructed of cement. The mine is usually employed as a demolition charge by being attached to a long pole and placed against buildings and fortifications.

FUNCTIONING. The mine is fuzed both electrically and mechanically. A hand grenade friction igniter is used as the non-electrical device.

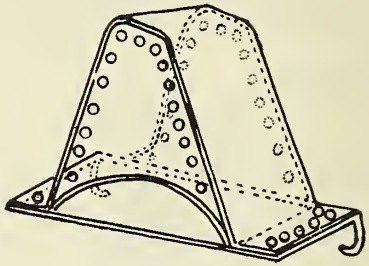
DISARMING. Cut the electrical leads, one at a time, approximately 15 cm (6 inches) from the mine body. Remove the fuze by lifting the detonator out of the fuze well. If non-electrical fuzing has been used, remove the igniter, being careful not to disturb the friction pull ring. DO NOT attempt to remove either type of fuzing if there are signs of corrosion around the fuze or signs of tampering. Destroy the mine in place or notify explosive ordnance disposal personnel.

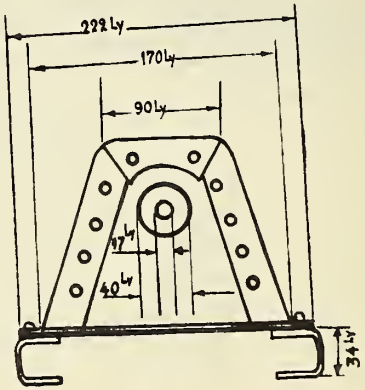
CHARACTERISTICS

Color	Gray
Weight	5.6 kg (13 pounds)
Length	22.9 cm (9 inches)
Diameter	12.7 cm (5 inches)
Filler	TNT
Construction	Cement



PHỐI HÌNH
PERSPECTIVE





HỮU DIỆN
RIGHT VIEW

VC SHEET METAL "TURTLE" MINE

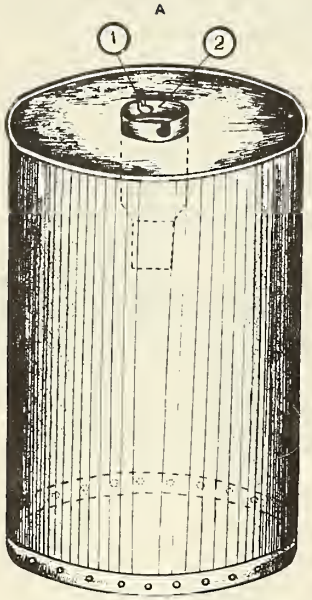
This "Turtle" mine is constructed of four separate pieces of sheet metal riveted together at the seams and coated with a waterproofing compound. A detonator well is located in the end of the mine.

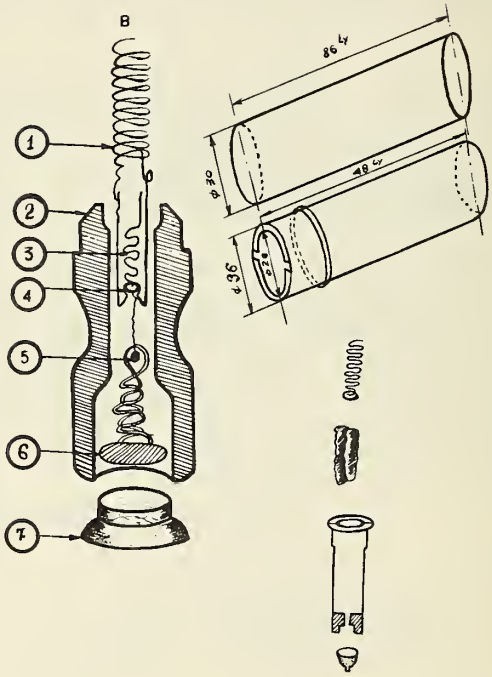
FUNCTIONING. This mine is fired both electrically and mechanically. The electrical detonator is placed in the fuze well and sealed in the wax or tar. The current for the detonator is supplied by a battery pack or hand held generator. The mechanical device is usually a pull release device operated remotely with a pull or trip wire.

DISARMING. Cut the two electrical leads, one at a time, approximately 15 cm (6 inches) from the mine body. Remove the detonator, if possible. If a mechanical firing device is employed, replace the safety pin prior to cutting any wires. Remove the firing device, if possible. If the mechanical firing device or electrical device cannot be removed safely, DO NOT transport or disturb the mine. Destroy the mine in place or notify explosive ordnance disposal personnel.

CHARACTERISTICS

Color	Black
Weight	9.2 kg (20 pounds)
Filler	Melinite or TNT
Weight of explosive	3.2-3.7 kg (7-8 pounds)
Height	12.7-15.4 cm (5-6 inches)


A
1
2


B
1
2
3
4
5
6
7
86 Ly
48 Ly
ø 30
ø 36

VC CYLINDRICAL MINE

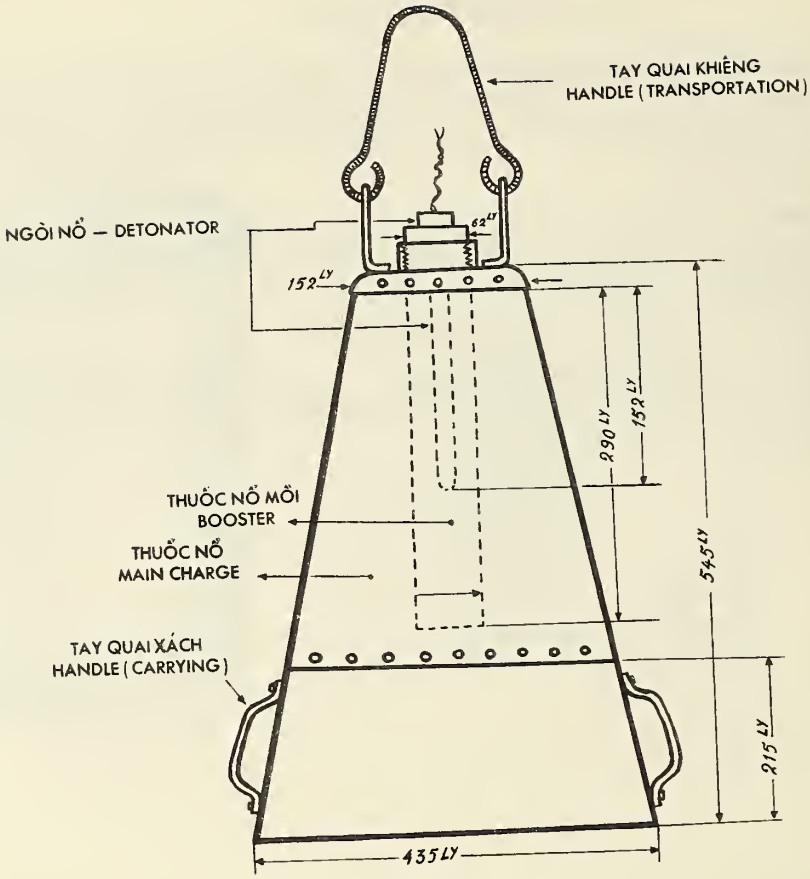
This locally manufactured mine is constructed of either sheet metal or shipping containers for artillery and mortar projectiles. The mine weight and size varies according to the type container used. The mine is usually fired electrically.

FUNCTIONING. This mine is fired electrically from a remote position. An electrical detonator is placed in the end of the container and covered with a water proofing compound. Current for detonation of the mine is supplied by a battery pack or a hand generator.

DISARMING. Cut the electrical leads, one at a time, approximately 15 cm (6 inches) from the mine body. Remove the detonator, if possible. DO NOT force the detonator when removing.

CHARACTERISTICS

Color.....	Varies
Length.....	Varies
Operation.....	Electrical
Filler.....	Any of the military explosives, Potassium Chlorate, or TNT


TAY QUAI KHIÊNG
HANDLE (TRANSPORTATION)
NGÒI NỔ — DETONATOR
62 LY
152 LY
290 LY
152 LY
THUỐC NỔ MỒI
BOOSTER
THUỐC NỔ
MAIN CHARGE
545 LY
TAY QUAI XÁCH
HANDLE (CARRYING)
215 LY
435 LY

LARGE VC WATER MINE

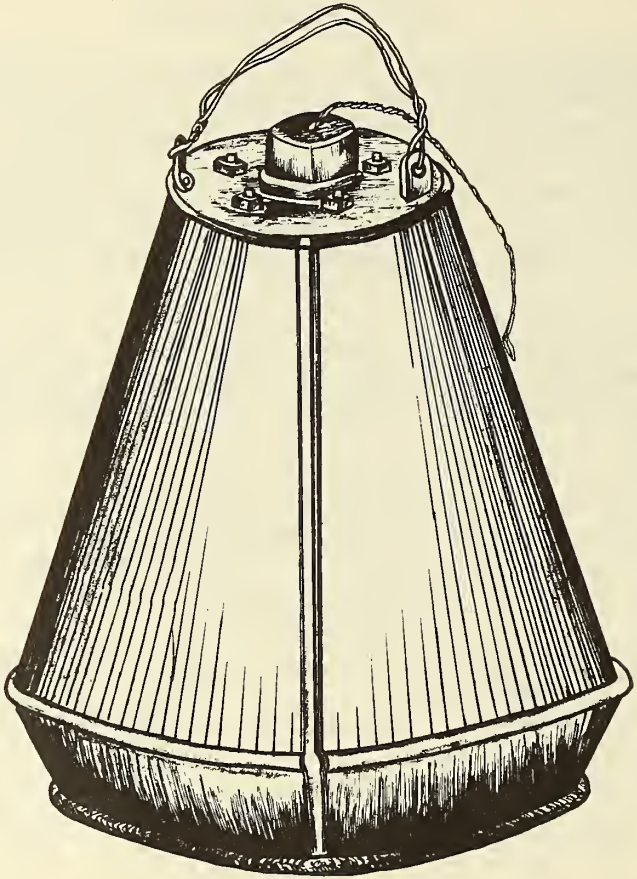
The water mine is composed of two parts, the explosives chamber and the flotation chamber, separated by a sheet metal partition. The water mine is employed against shipping in rivers and canals. The flotation chamber built into the mine serves to keep the mine off the bottom and suspended in midstream. The depth of the mine is controlled by a series of ropes from the shore. The mine is constructed of medium weight sheet metal with riveted seams. All seams are covered with a waterproofing compound.

FUNCTIONING. The mine is fired electrically from the shore using a series of batteries or a hand generator. With the approach of a ship the mine is adjusted remotely to the proper depth to give the optimum effect from the blast.

DISARMING. Cut all electrical leads leading to the mine, one at a time, approximately 15 cm (6 inches) from the mine.

CHARACTERISTICS

Weight	38.2 kg (83 pounds)
Diameter	43.7 cm (17 inches)
Height	63 cm (25 inches)
Filler	TNT
Weight of Filler	18.8 kg (41 pounds)



SMALL VC WATER MINE

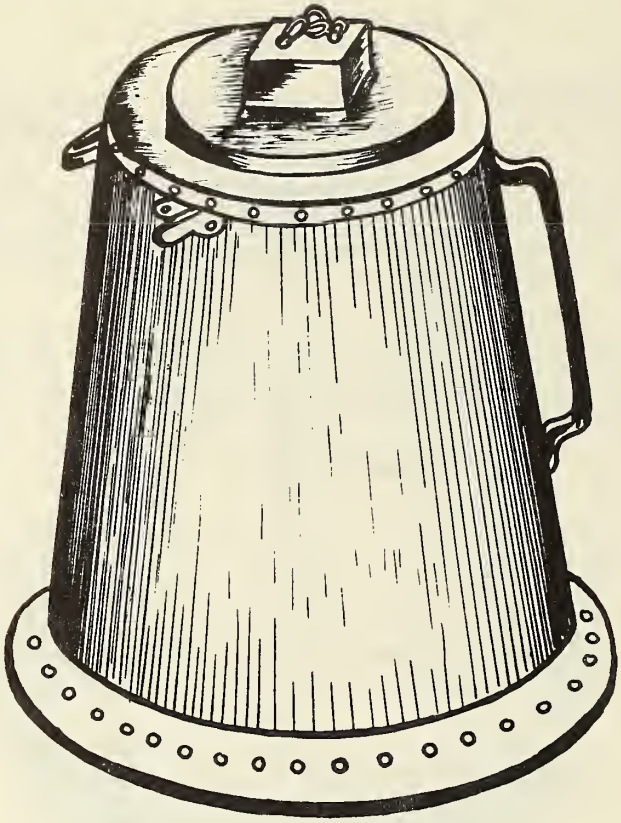
This locally manufactured water mine is of a type constructed of sheet metal, rolled into a short conical shape, and fastened with rivets.

FUNCTIONING. The mine is placed in the channel of the river or stream and adjusted in height according to the traveling depth of ships in that particular body of water. The mine is fuzed electrically and detonated by means of a battery pack.

DISARMING. Cut all electrical leads leading to the mine, one at a time, approximately 15 cm (6 inches) from the mine. DO NOT ATTEMPT TO REMOVE THE BOOSTER CAP OR DETONATORS FROM THE MINE.

CHARACTERISTICS

Weight.....	12.4 kg (27 pounds)
Height.....	32 cm (12 inches)
Diameter.....	26.7 cm (11 inches)
Filler.....	TNT
Weight of explosive.....	6.9 kg (15 pounds)



VC NON-ELECTRICAL SHAPED CHARGE MINE

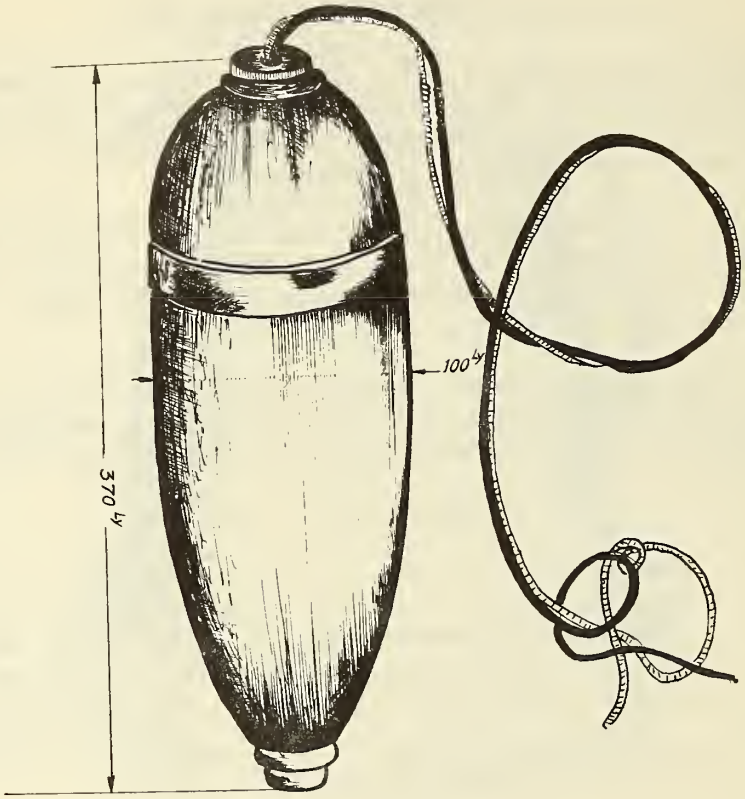
This mine is constructed of sheet metal and employs a sheet metal cone for shaped charge effect. The mine is employed with two friction pull igniters incorporating a nine second delay. The mine is usually employed as a demolition device by VC saboteurs.

FUNCTIONING. The mine is placed at the target, and the two pull wires on the fuze are extracted. This action initiates the 9 second delay powder train. The delay train flashes to the detonator, causing detonation of the mine.

DISARMING. No attempt should be made to disarm this mine, as booby-traps have been found to be incorporated in the fuzing mechanism. Destroy the mine in place or notify explosive ordnance disposal personnel.

CHARACTERISTICS

Color.....	Varies
Length.....	20.3 cm (8 inches)
Diameter at largest point.....	22.9 cm (9 inches)
Weight.....	6.9 kg (15 pounds)
Filler.....	TNT or homemade explosives which are very sensitive.
Weight of Explosive.....	3.7-6.9 kg (9 pounds)


100μ
370μ

VC IMPROVISED ANTIPERSONNEL AND ANTITANK MINE

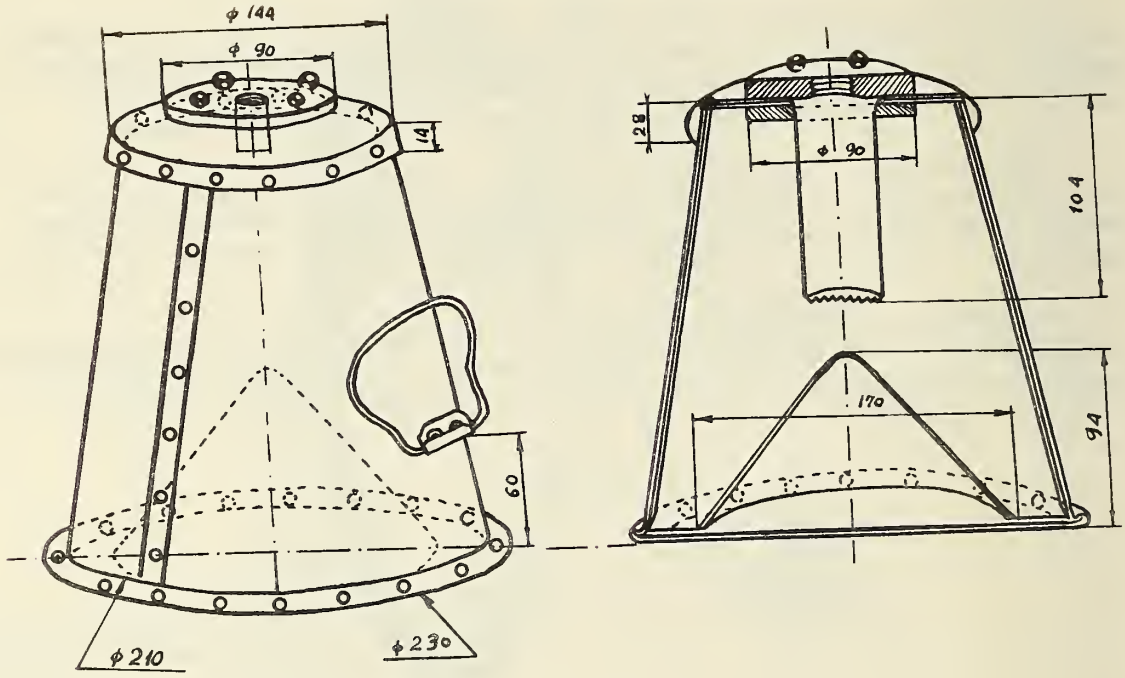
This type of mine is improvised from dud artillery and mortar projectiles. Depending on its size and explosive filler, it is effective against both armored vehicles and personnel. This mine is usually employed along the sides of roads and trails and detonated remotely.

FUNCTIONING. The projectile fuze is removed and a hole is drilled into the explosive to accept an electrical detonator. The mine is detonated remotely by an electrical charge from a battery pack or hand held generator.

DISARMING. Cut the electrical leads to the detonator, <u>one at a time</u>, approximately 15 cm (6 inches) from the projectile or mine. This mine should be destroyed in place or explosive ordnance disposal personnel should be notified.

CHARACTERISTICS

Color.....	Varies
Weight.....	Varies
Explosive.....	TNT or any type of military explosive may be found in these types of improvised mines.


φ 144
φ 90
14
60
φ 210
φ 230
28
φ 90
104
170
94

VC ELECTRICAL ANTIVEHICULAR SHAPED CHARGE MINE

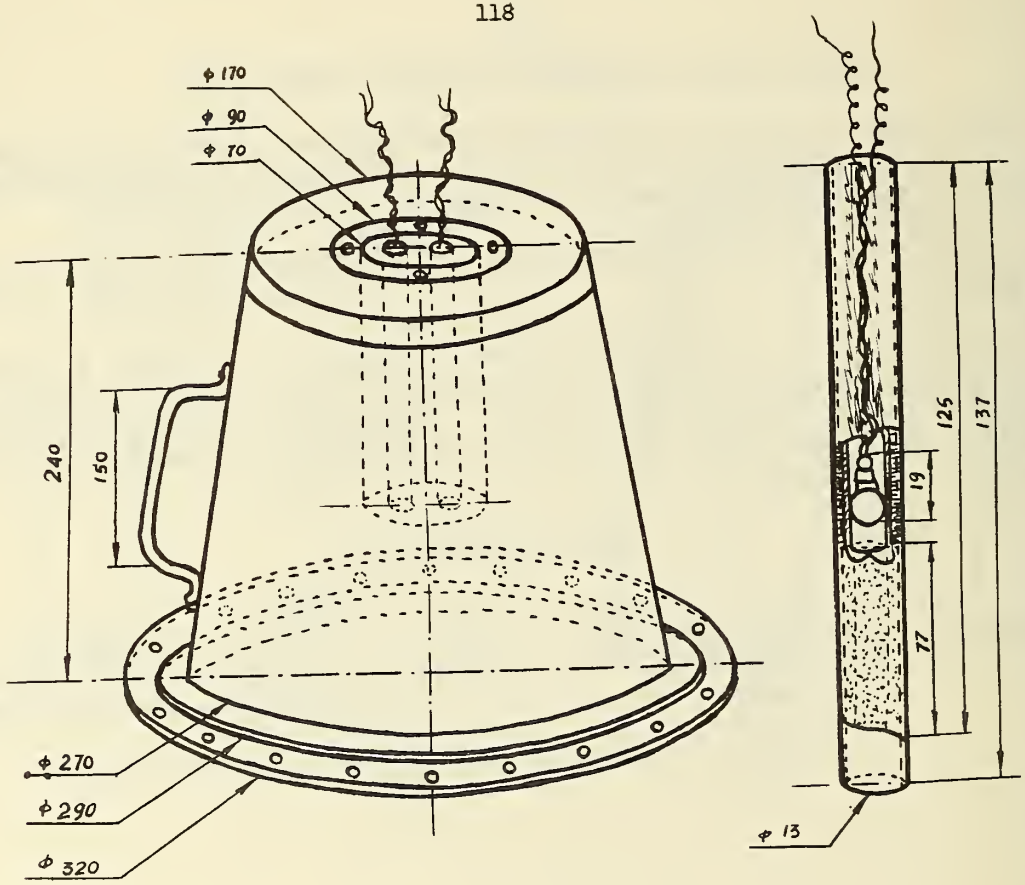
This short, pyramidal shaped charge is employed against armored vehicles and reinforced fortifications. It is constructed of sheet metal and fastened at the seams by rivets or welding.

FUNCTIONING. This mine is usually detonated electrically from an ambush position.

DISARMING. Cut the electrical leads leading into the fuze of the mine, one at a time, approximately 15 cm (6 inches) from the fuze. In case of a mechanical fuze, replace the safety pin. If the type of fuze cannot be determined destroy the mine in place or notify explosive ordnance disposal personnel.

CHARACTERISTICS

Color	Black
Weight	7.8 kg (17-18 pounds)
Diameter	20.3-25.4 cm (8-10 inches)
Length	20.3-25.4 cm (8-10 inches)
Filler	TNT
Weight of explosive	5.1 kg (11 pounds)


φ 170
φ 90
φ 70
240
150
φ 270
φ 290
φ 320
125
137
19
77
φ 13

VC SHORT CONE SHAPED CHARGE MINE

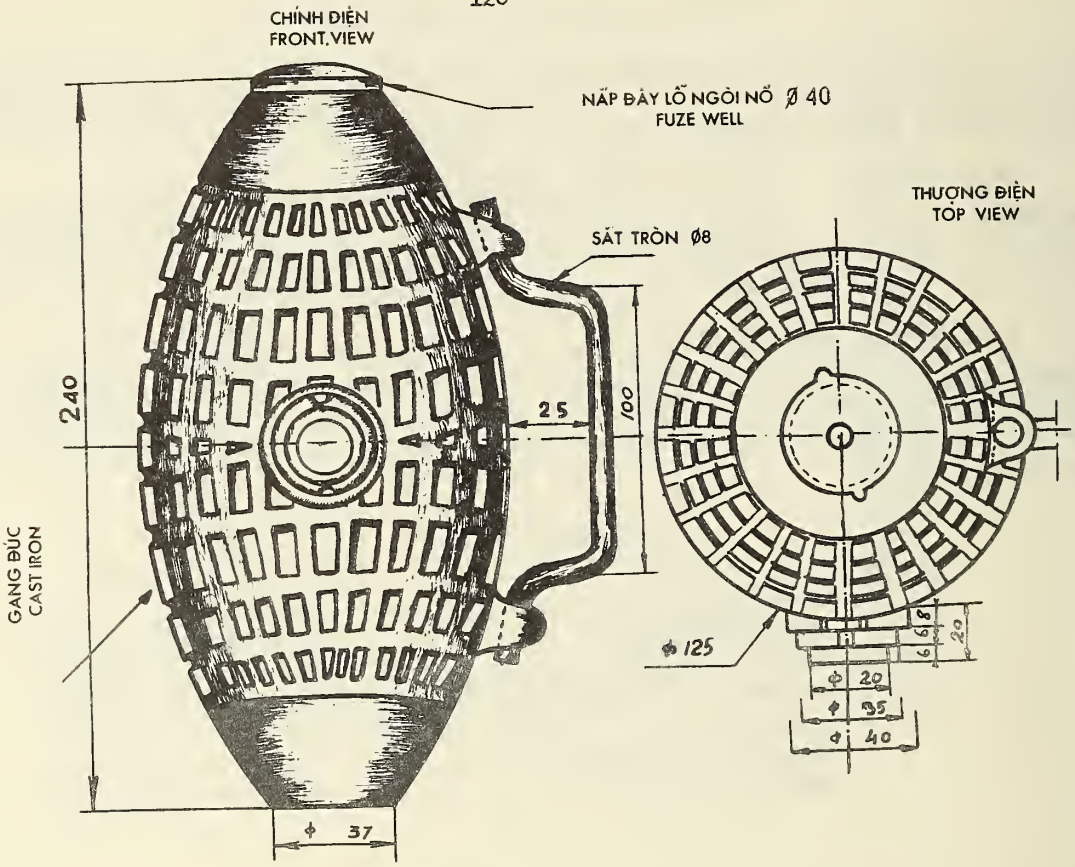
This shaped mine is employed as a general purpose demolition charge. The mine is constructed of heavy sheet metal, and all seams are riveted or welded. A dual detonator system is employed for reliability.

FUNCTIONING. The mine is detonated either electrically or with a mechanical device. For electrical firing, the current is supplied by a battery pack or a hand held generator (blasting machine). The mechanical device is of the pull friction device or pressure type.

DISARMING. Cut all electrical leads leading to the mine, one at a time, approximately 15 cm (6 inches) from the mine. DO NOT ATTEMPT TO REMOVE THE BOOSTER CAP OR DETONATORS FROM THE MINE. When a mechanical device is utilized, replace the safety pin or safety wire before removing the mine.

CHARACTERISTICS

Color	Black
Overall Weight	12.4 kg (27 pounds)
Height	25.4 cm (10 inches)
Diameter	26.7 cm (11 inches)
Filler	TNT
Weight of explosive	6.9 kg (15 pounds)
Construction	Heavy sheet metal


CHÍNH DIỆN
FRONT.VIEW
NẮP ĐẬY LỖ NGÒI NỔ Ø 40
FUZE WELL
THƯỢNG DIỆN
TOP VIEW
SẮT TRÒN Ø8
240
25
100
GANG ĐÚC
CAST IRON
ϕ 37
ϕ 125
6
8
20
ϕ 20
ϕ 35
ϕ 40

VC CAST IRON FRAGMENTATION ANTITANK MINE

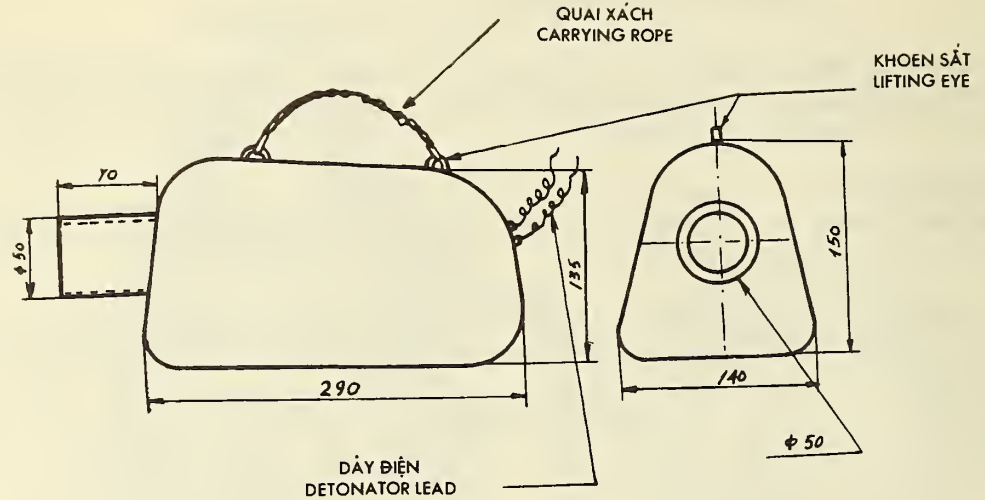
This egg shaped mine is constructed of cast iron with serrations on its outer surface. The mine incorporates a handle for carrying. The detonator well is located in the end.

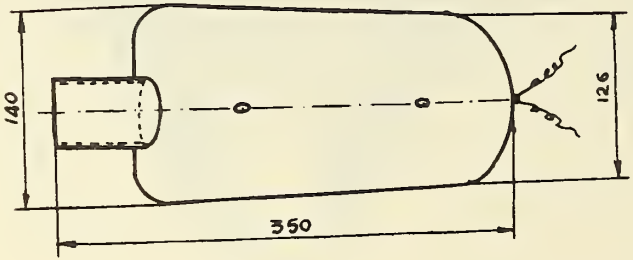
FUNCTIONING. The mine is fuzed with an electrical detonator and is controlled remotely. Current for the detonator is supplied by a battery pack or hand held generator.

DISARMING. Cut the electrical detonator leads, one at a time, approximately 15 cm (6 inches) from the mine. Remove the detonators if possible.

CHARACTERISTICS

Color	Gray
Weight	5.5 kg (12 pounds)
Length	22.9 cm (9 inches)
Diameter	12.7 cm (5 inches)
Filler	Melinite or TNT
Operation	Electrical


QUAI XÁCH
CARRYING ROPE
KHOEN SẮT
LIFTING EYE
70
ϕ50
135
290
150
140
ϕ 50
DÂY ĐIỆN
DETONATOR LEAD


140
126
350

VC "MOUND" SHAPED MINE

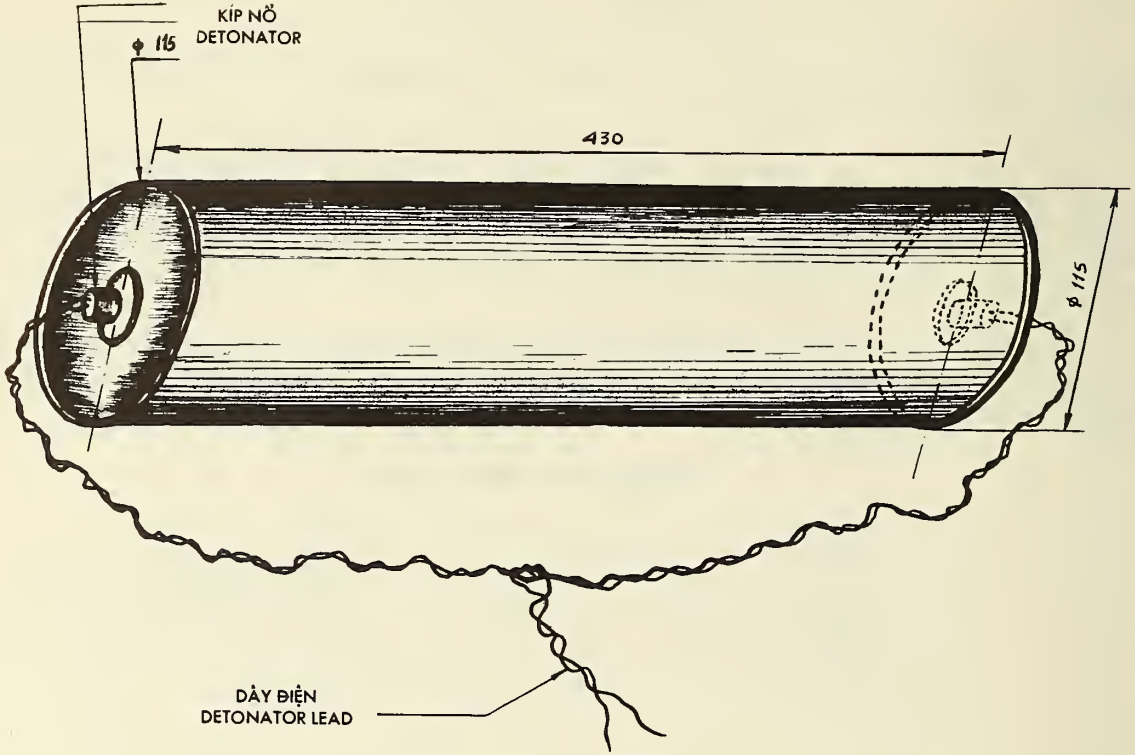
This mine is constructed of cement and is similar to other mines covered in this booklet.

FUNCTIONING. The mine is fuzed electrically and incorporates one detonator well encased in an iron pipe. The pipe is located in the end of the mine housing. The detonator is placed in the pipe fuze well and is sealed with a waterproofing compound. The mine is fired by means of a battery pack or hand held generator.

DISARMING. Cut the two electrical leads, one at a time, approximately 15 cm (6 inches) from the body of the mine. Remove the detonator, if possible. Do not force the detonator out of the fuze well.

CHARACTERISTICS

Color	Gray
Weight	6 kg (13 pounds)
Length	34.9 cm (13 3/4 inches)
Diameter	14 cm (5½ inches)
Filler	TNT
Operation	Electrical


KÍP NỔ
DETONATOR
ϕ 115
430
ϕ 115
DÂY ĐIỆN
DETONATOR LEAD

VC ROUND VOLUME MINE

This mine is constructed of sheet metal with all seams welded.

FUNCTIONING. The mine is fuzed electrically and employs two detonators located in the ends of the mine. The mine is fired by means of a battery pack or hand held generator.

DISARMING. Cut the leads to the detonators, one at a time, 15 cm (6 inches) from the mine. Remove the detonator, if possible. Otherwise, destroy the mine in place or notify explosive ordnance disposal personnel.

CHARACTERISTICS

Color	Dark Green
Length	43 cm (17 inches)
Diameter	11.5 cm (5 inches)
Operation	Electrical
Overall weight	7 kg (15 pounds)
Weight of explosive charge	6 kg (13 pounds)
Type of explosive charge	Melinite

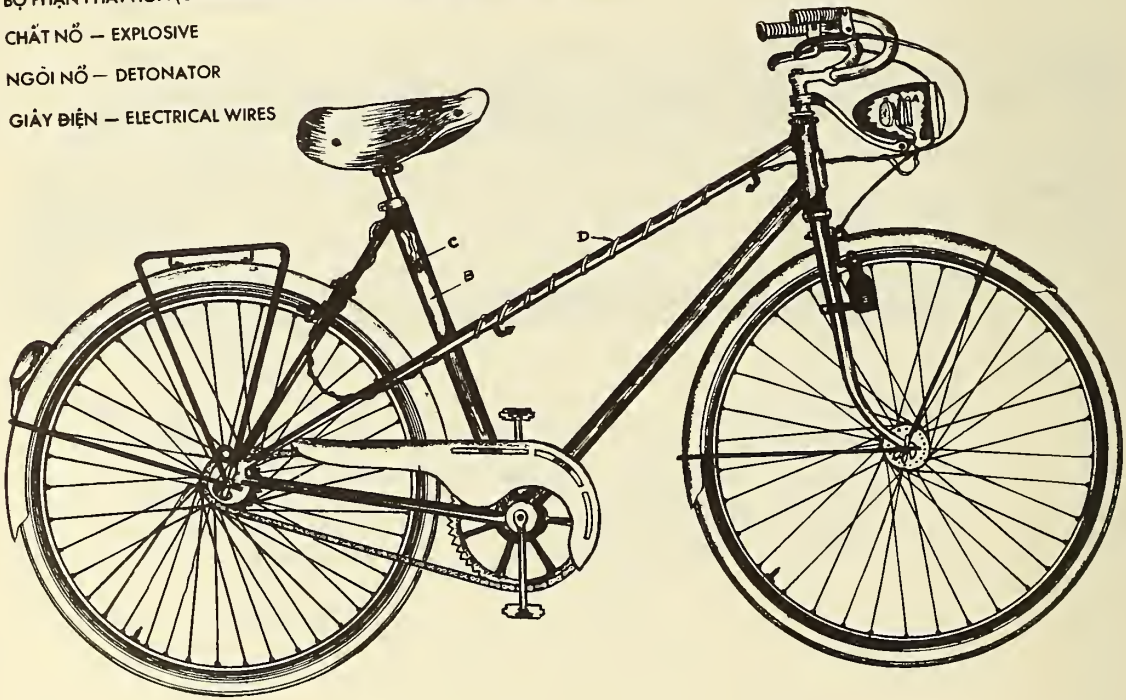
MÌN XE ĐẠP

A BỘ PHẬN PHÁT HỎA (ĐỒNG HỒ VÀ PIN ĐÈN) TIMING DEVICE & BATTERIES

B CHẤT NỔ — EXPLOSIVE

C NGÒI NỔ — DETONATOR

D GIÂY ĐIỆN — ELECTRICAL WIRES



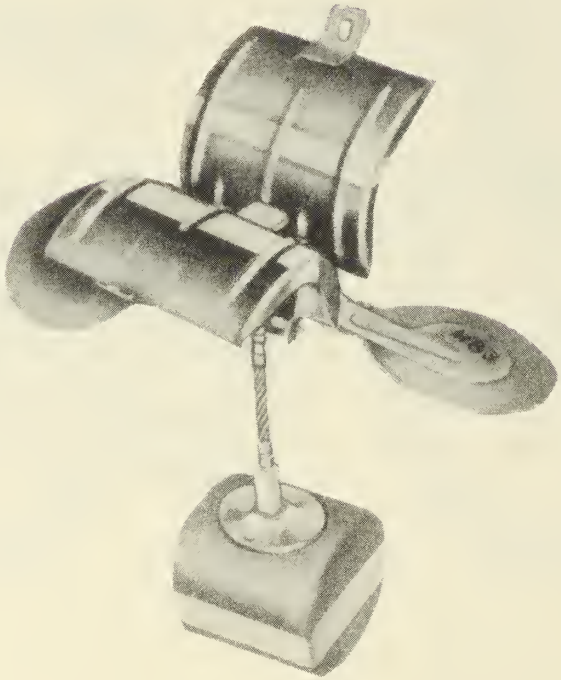
VC BICYCLE MINE

This bicycle is used as a sabotage device. It is fuzed and fired electrically by means of a watch time delay device or by means of the bicycle generator.

FUNCTIONING. The explosives within the bicycle frame will detonate when the preset time on the watch delay device has expired, or when the bicycle generator is placed in the circuitry and the bicycle is operated at sufficient speed to generate the required current.

CAUTION. Never rotate the wheels, push, or ride a bicycle suspected of being mined. DO NOT attempt to remove the detonators or dissemble any part of the bicycle.

DISARMING. Cut all wires located on the external part of the frame and head lamp assembly. Place the generator away from the wheel. Destroy the mine or notify explosive ordnance disposal personnel for assistance.



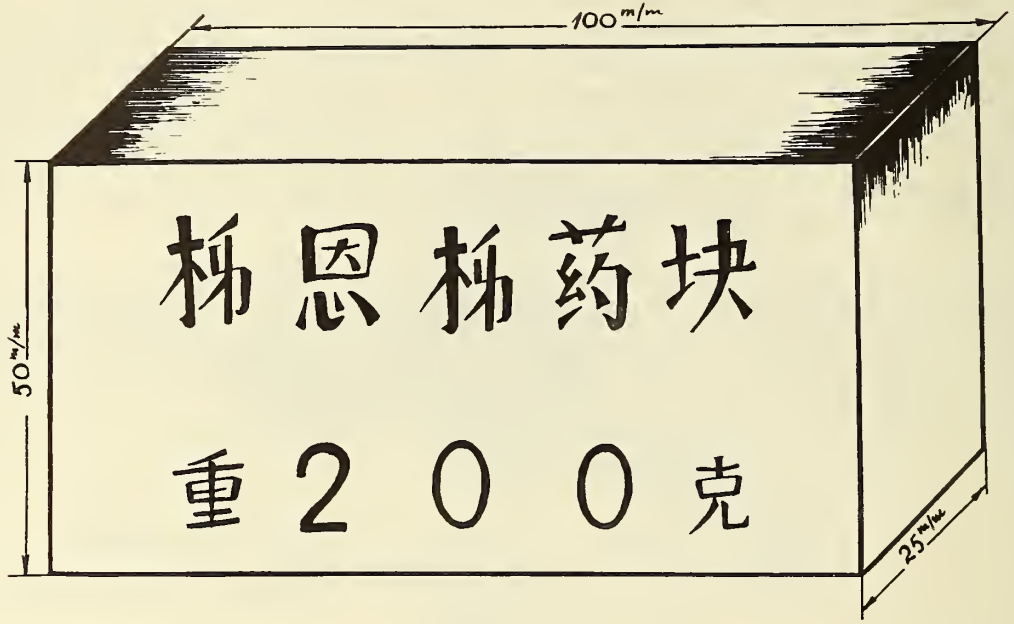
US BUTTERFLY BOMB (Bomb, Fragmentation M83)

Although the Butterfly Bomb does not come under the classification of a mine, its effect upon detonation is just as deadly. These devices may be found in formerly unfriendly areas. This bomb can be fitted with several different types of fuzes. Some may be set to explode in mid-air, and some on impact with the first object hit. A time fuze set from 1 to 30 minutes may be fitted to some. However, others fall to the ground, and due to the type fuze employed may still not have exploded. This type of bomb can go off instantly when someone bumps it or merely touches it.

Vibrations of the ground by a person walking nearby will detonate it also. If you see one of these bombs, do not go near it -- DO NOT TOUCH IT -- LEAVE IT ALONE! Warn those in your vicinity and notify the proper authority so that an EOD specialist may be called. Only Explosive Ordnance Disposal Units may remove or dispose of these bombs.

CHARACTERISTICS

Weight.....	1.8 kg (4 pounds)
Filler.....	TNT
Color.....	OD with yellow markings


100 m/m
杨恩杨药块
重200克
50 m/m
25 m/m

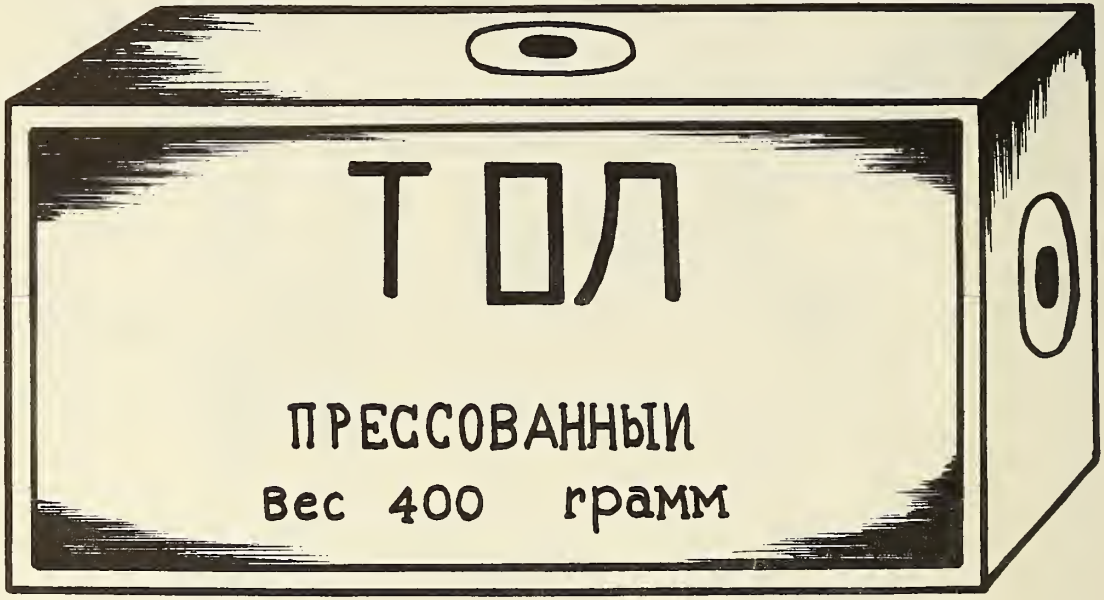
CHICOM TNT DEMOLITION BLOCK

The Chicom TNT demolition block is rectangular in shape, yellow in color and comes in 200 and 400 grams (.44 and .88 pounds) sizes. It is wrapped in waxed paper with a detonator well in the end of the block. The detonator well is marked on the waxed paper by a black dot. This explosive is commonly used by the VC.

FUNCTIONING. The TNT block can be fired by any of the standard or improvised firing devices.

CHARACTERISTICS

Color.....	Yellow
Weight.....	200 or 400 grams (.44 or .88 pounds)
Size.....	4.5X2.5X10.2 cm (1 3/4X 1X4 inches)


ТОЛ
ПРЕССОВАННЫЙ
Вес 400 грамм

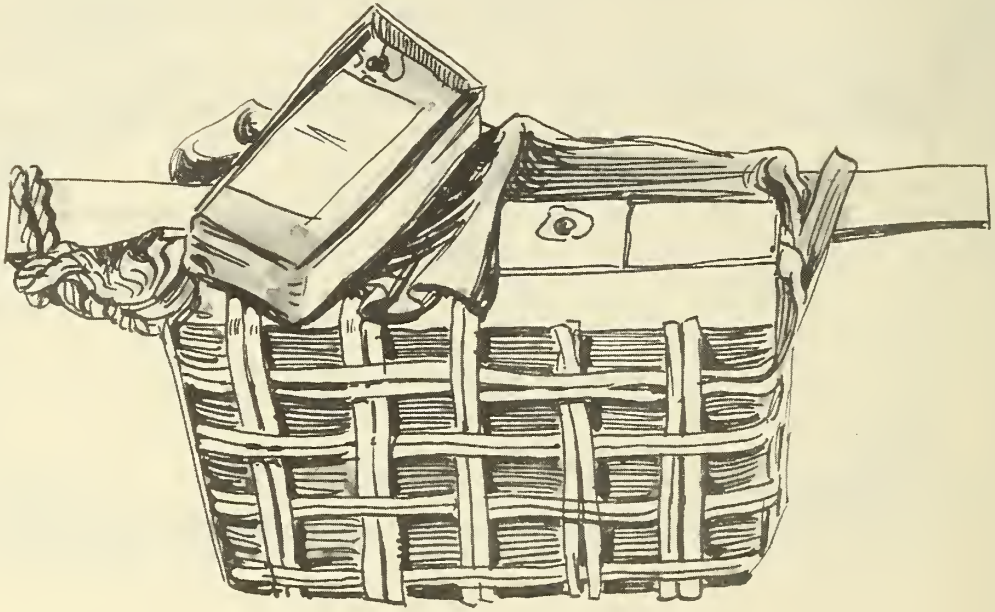
SOVIET TNT DEMOLITION BLOCK

The Soviet TNT demolition block is rectangular shaped and has a detonator well in the end of the block. It is covered with waxed paper having an inscription in Russian as to the contents. This demolition block is used as a booster block for all demolition work. Its use by the VC should be anticipated.

FUNCTIONING. The block can be fired by any of the standard or improvised firing devices.

CHARACTERISTICS

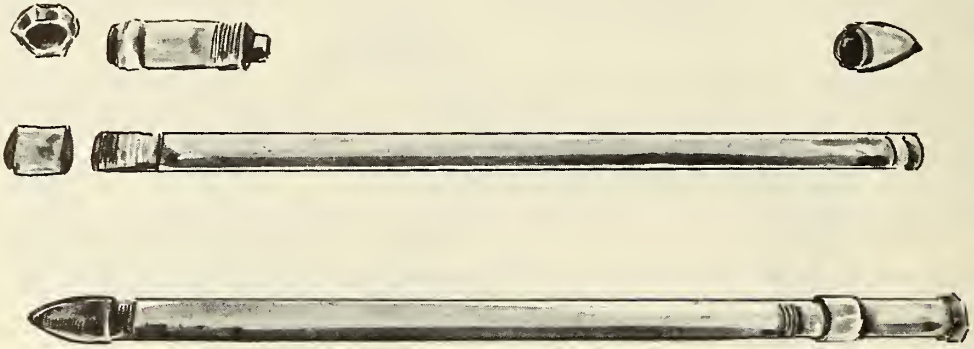
Weight.....	0.4 kg (.96 pounds)
Size.....	5.1X5.1X10.2 cm (2X2X4 inches)



VC SATCHEL CHARGE

This VC charge is made from waterproof cloth, rope, wire or bamboo strips, 2.3 to 4.6 kg (5 to 10 pounds) of explosive, and the detonator in the handle of a stick grenade. Extreme caution must be exercised when handling these charges, because potassium chlorate, a sensitive explosive, may be found in them.

EMPLOYMENT. These charges have been used for destroying bunkers and fortifications during enemy assaults and for other types of demolition work.



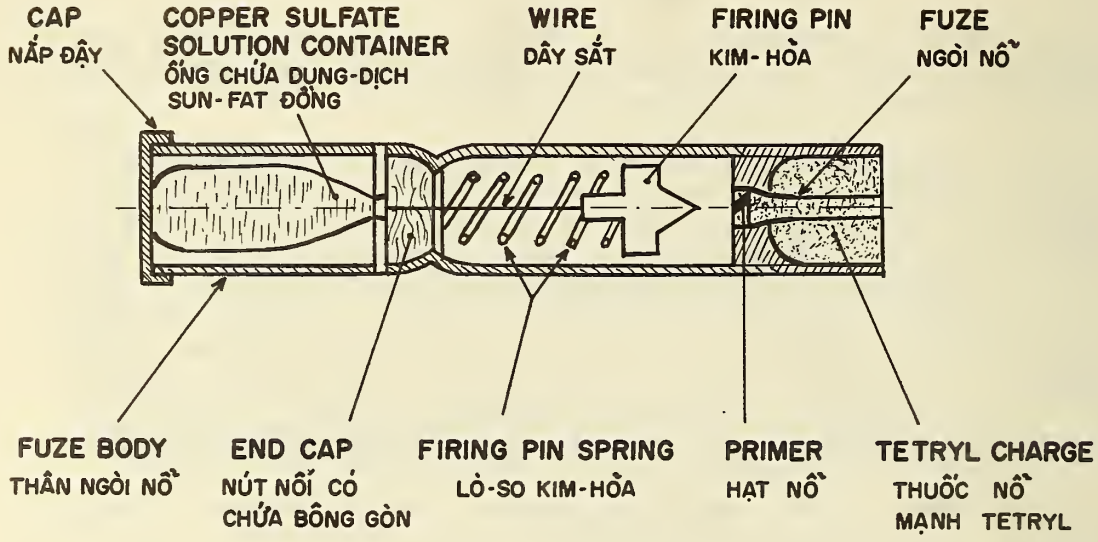
BANGALORE TORPEDO

Although the bangalore torpedo was designed originally for the breaching of barbed wire defenses, the VC have made extensive use of it as an antitank and an antipersonnel mine.

The illustration gives an idea of the general construction of a bangalore. Other types of bangalores are being used by the VC including locally constructed types. The appearances and the construction of all of these bangalores are generally the same.

EMPLOYMENT. Enemy troops lay the torpedos on a likely vehicle or troop approach. They conceal themselves some 12 to 15 meters away in foxholes, and upon the approach of vehicles or assaulting troops the VC pull a cord tied to the friction igniter. A 4 to 7 second delay fuze burns before the torpedo is detonated.

DISARMING. In disarming these objects, cut any wire attached to the fuze. If a safety pin hole exists, place a small nail or piece of strong wire in it, and remove the fuze.

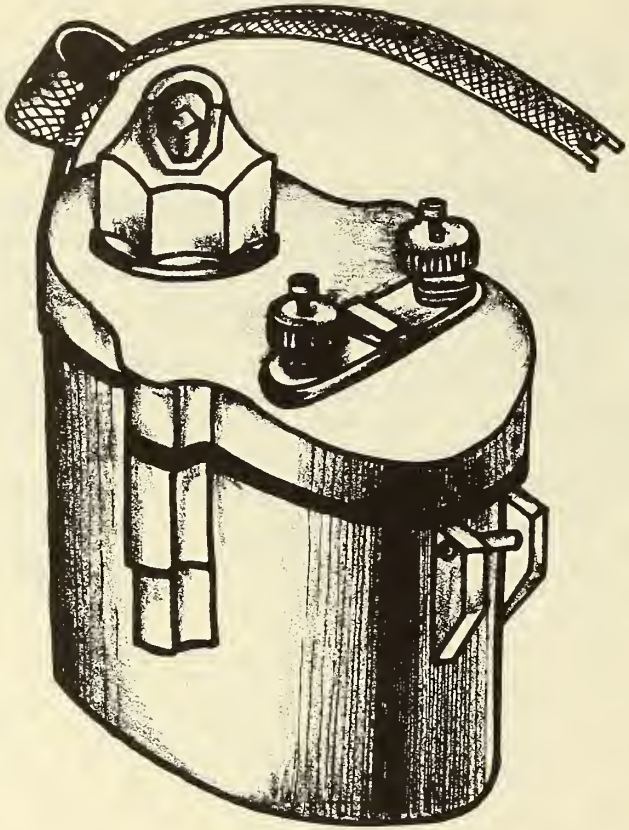

CAP
NẮP ĐẬY
COPPER SULFATE SOLUTION CONTAINER
ỐNG CHỨA DUNG-DỊCH SUN-FAT ĐỒNG
WIRE
DÂY SẮT
FIRING PIN
KIM-HÒA
FUZE
NGÒI NỔ
FUZE BODY
THÂN NGÒI NỔ
END CAP
NÚT NỐI CÓ CHỨA BÔNG GÒN
FIRING PIN SPRING
LÒ-SO KIM-HÒA
PRIMER
HẠT NỔ
TETRYL CHARGE
THUỐC NỔ MẠNH TETRYL

CHEMICAL FIRING DEVICE

This firing device may be employed by the VC for sabotage purposes. It is attached to mines and demoliton charges. Its delay is between 20 and 38 minutes.

FUNCTIONING. The copper sulfate tube is broken and the solution reacts on the metal wire securing the firing pin. The wire is weakened and breaks, allowing the spring driven firing pin to strike the primer, resulting in detonation of the charge.

DISARMING. Once the firing device has been initiated, there is no way to safe the device. In an extreme emergency, unscrew the firing device and place it away from the charge. Evacuate the area and wait at least one hour before returning to examine the device.

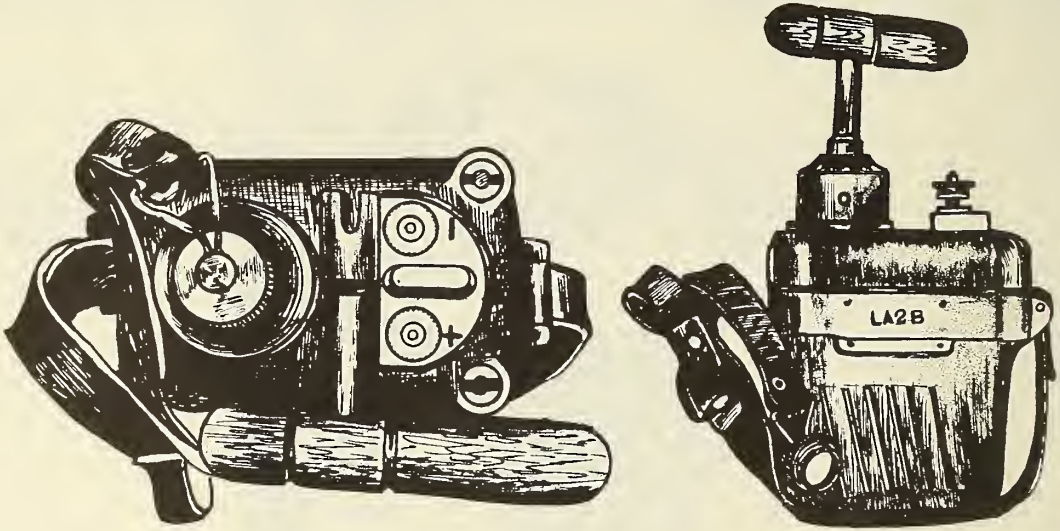


SOVIET BLASTING MACHINE PM-2

The Soviet PM-2 Blasting Machine is designed to fire all types of electrical blasting caps. It is capable of igniting 10 blasting caps at a time.

CHARACTERISTICS

Case	Metal
Height	12.1 cm (4.75 inches)
Width	9.3 cm (3.75 inches)
Weight	2.0 kg (4.4 pounds)


LA2B

CHICOM BLASTING MACHINE LA 2B

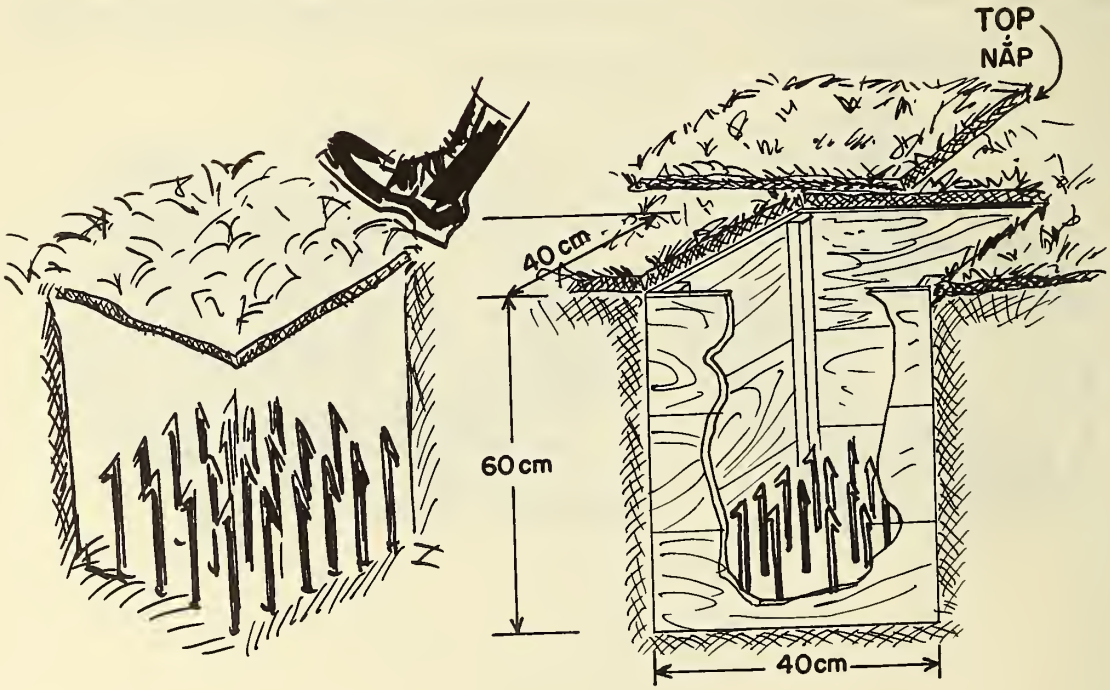
The Chicom LA 2B blasting machine is used to detonate all types of electrical blasting caps. It can detonate 10 blasting cap simultaneously.

CHARACTERISTICS

Case.....	Metal
Height.....	17.0 cm (7 inches)
Width.....	14.0 cm (5.5 inches)
Weight.....	2.7 kg (5.5 pounds)

SPIKE TRAP BOX

HÒM BẪY CHÔNG



SPIKE TRAP BOX

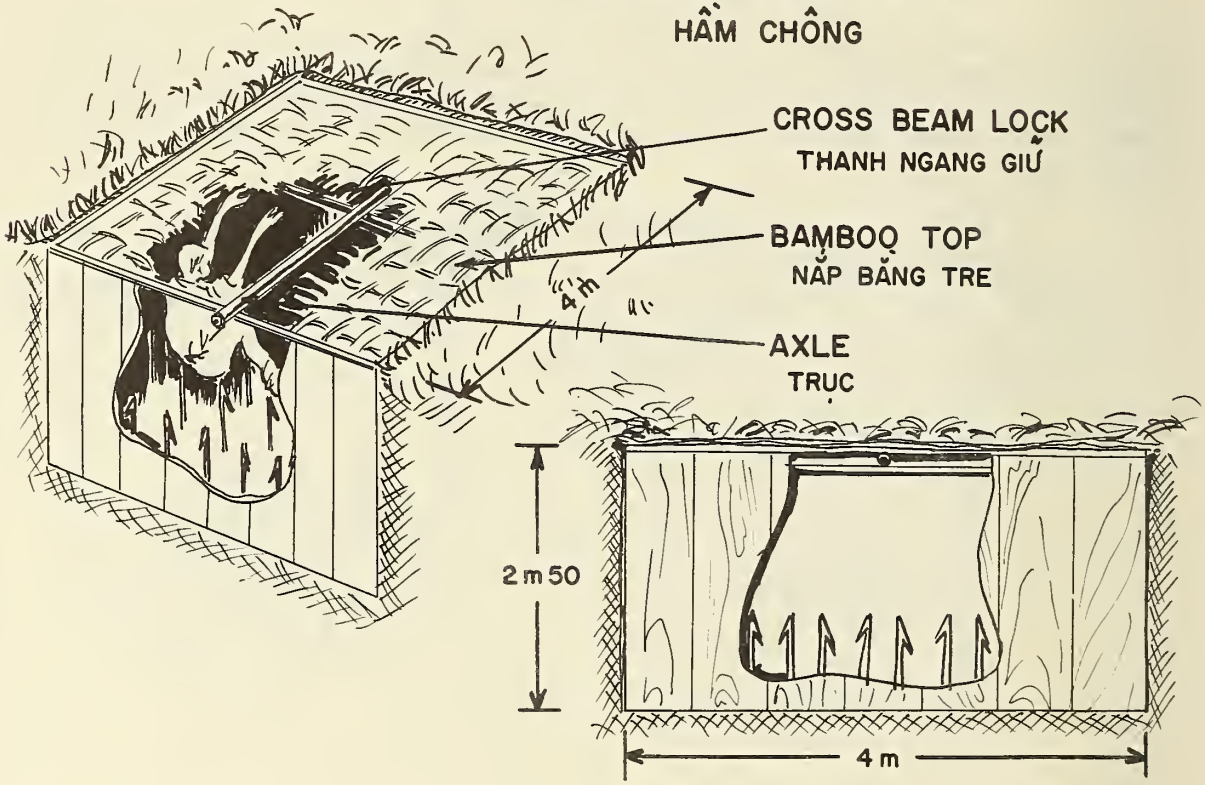
This trap is a wooden box made of boards which are joined together with four corner posts. The box has a separate wooden top, but is bottomless. Barbed spikes are made of iron and placed in the bottom pointing upward. This trap is usually set up on muddy roads to provide favorable camouflage.

CHARACTERISTICS

Size.....	40 cm (15.7 inches) each side and 60 cm (23.6 inches) deep

SPIKE TRAP PIT

HẦM CHÔNG



SPIKE TRAP PIT

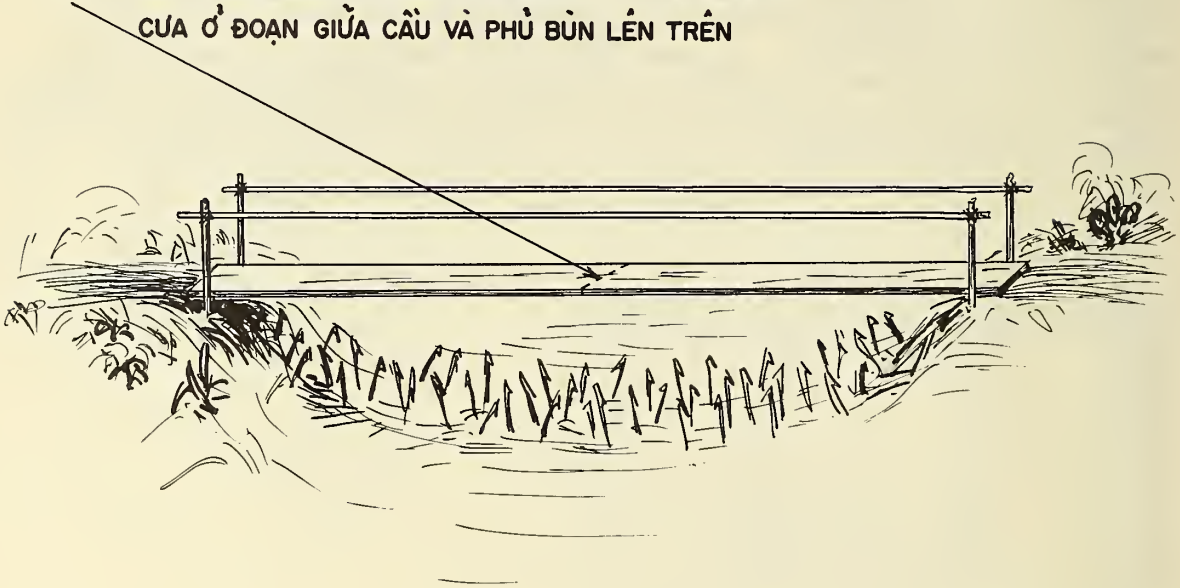
A trap pit is a large trap box with a bamboo top. Stakes are made of bamboo and covered with tin barbed bits. Trap pits are usually dug at curves on high roads. When a man steps on a pit, he will fall into it and the top of the pit will turn on an axle to its former position. During normal periods (i.e. no operations are conducted in the area) the top of the pit will be locked with a cross beam so that it can be traversed without danger. When a man falls into the pit he will be injured by barbed stakes which cut his thighs and hips or stab him through the back.

CHARACTERISTICS

Size.....	4 meters (12.3 feet) each side and 2.5 meters (8.3 feet) deep.

TRAP BRIDGE
CẦU BẪY

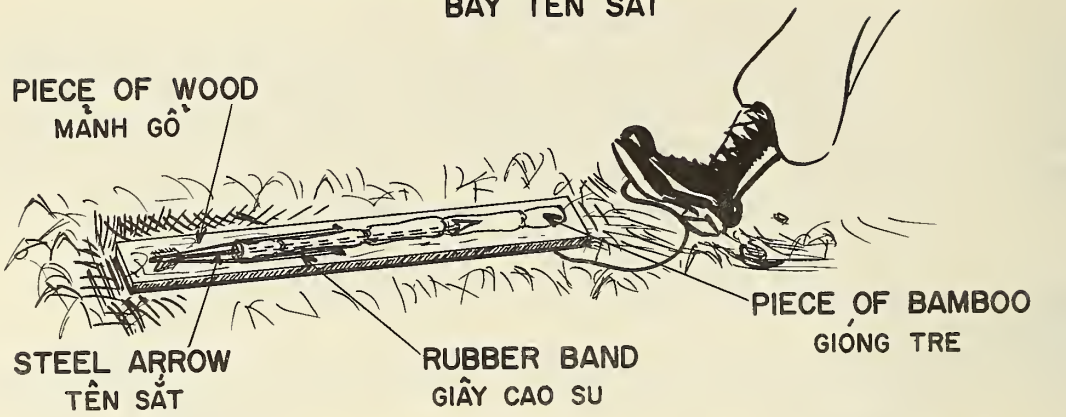
CUT AT THE MIDDLE AND COVERED WITH MUD:
CƯA Ở ĐOẠN GIỮA CẦU VÀ PHỦ BÙN LÊN TRÊN

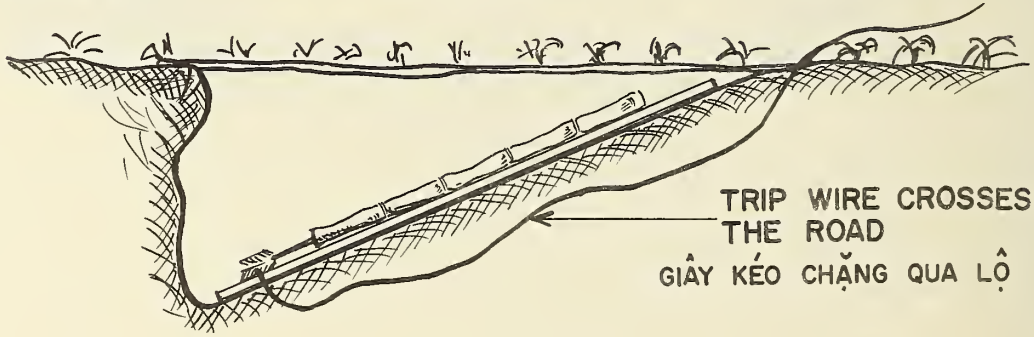


TRAP BRIDGE

A trap bridge is an old bridge across a ditch which is partially cut at the middle. These cuts are covered with mud. Barbed stakes are laid in the ditch. Sometimes the ditch is blocked at one end to retain the water so that the spikes cannot be discovered. If the ditch is not blocked, steel barbed spikes are driven into the ditch, level with the mud. Both sides of the ditch may be lined with spikes. Trap bridges are used to hinder the progress of search and clearing operations.

STEEL ARROW TRAP
BẪY TÊN SẮT





STEEL ARROW TRAP

This trap has a barrel made of a piece of bamboo 1 meter long. It is fastened to a piece of wood with nails and wire. A 30 cm steel arrow is placed in the piece of bamboo with a rubber band attached to the piece of wood. A catch to lock the rubber band is connected with a trip wire. The trip wire connected with the catch will be laid across a trail. When a man hits the wire, the latch will be disengaged and the rubber band will contract and push the steel forward to hit his stomach.

BAMBOO WHIP

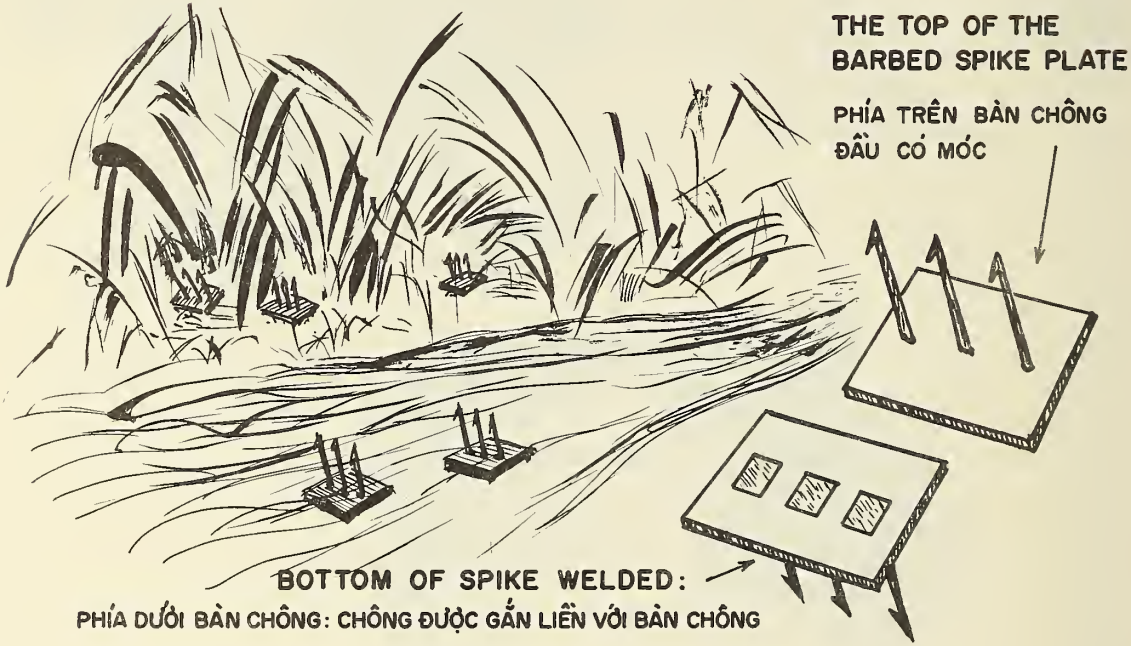
BẪY BẬT BẰNG TRE

BAMBOO WHIP

A bamboo whip is a piece of bamboo 1 to several meters long. A trip wire is used to bend the bamboo like a cross bow. One end of the bamboo is mounted with spikes. When a man hits the wire, the curved bamboo will strike him in the leg or stomach. Generally, the victim is hit suddenly and can not take time to defend himself. Camouflage of the whip is difficult because of the length of the bamboo.

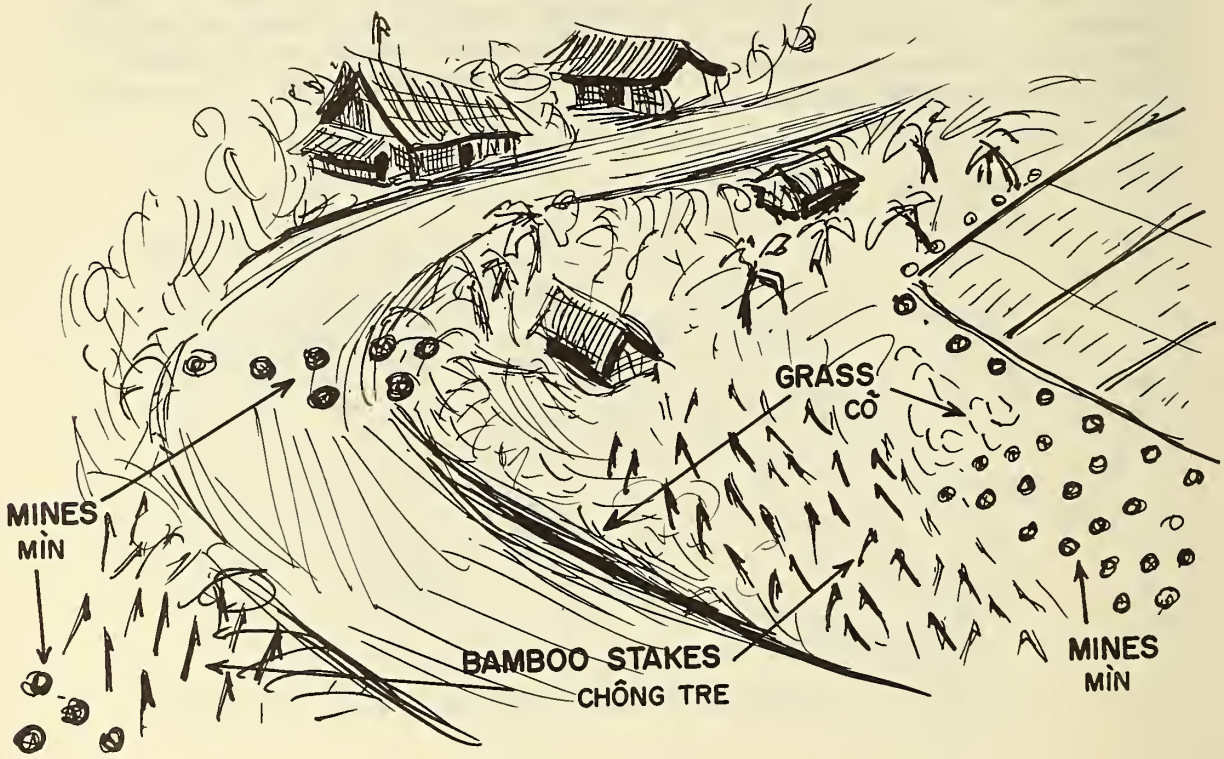
BARBED SPIKE PLATE

BÀN CHÔNG ĐẦU CÓ MÓC



BARBED SPIKE PLATE

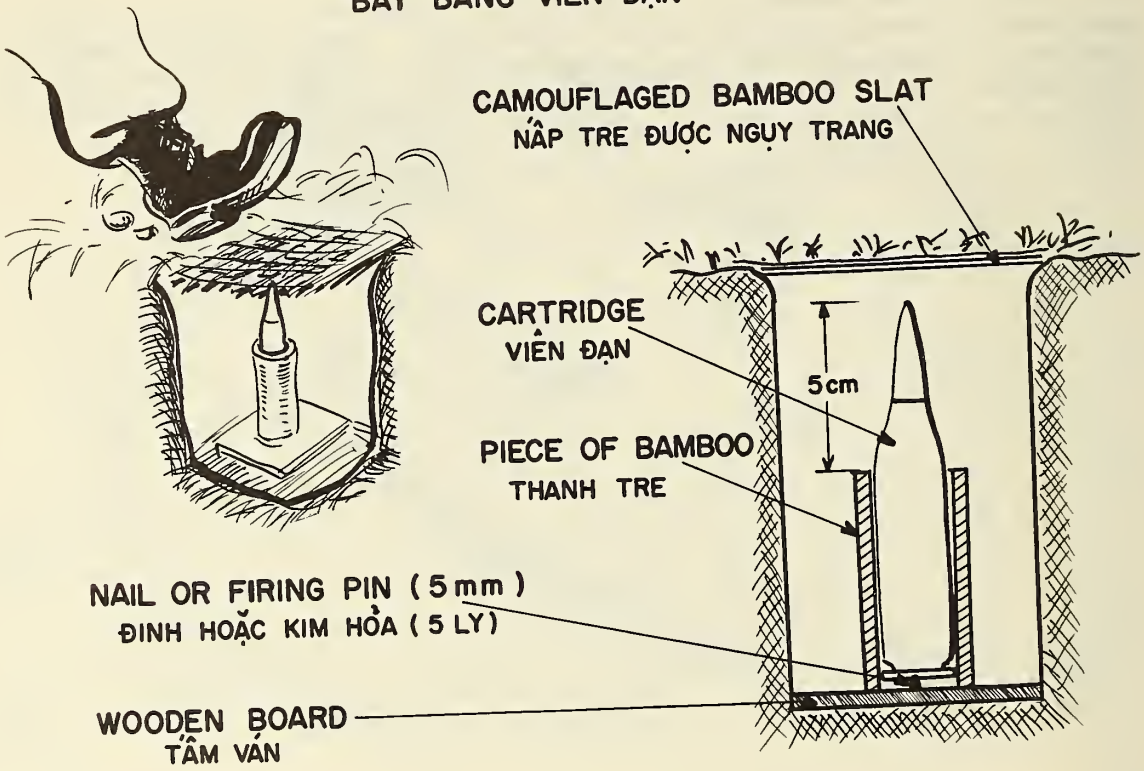
A barbed spike plate is made of two or more steel barbed spikes fastened to a piece of wood. The spikes are strongly fastened and are difficult to remove from the plate. When a man steps on the spike plate, the spike may penetrate through his shoe and foot. To remove the spike the barb must be cut off first.


GRASS
CỎ
MINES
MÌN
BAMBOO STAKES
CHÔNG TRE
MINES
MÌN

POINTED BAMBOO STAKES

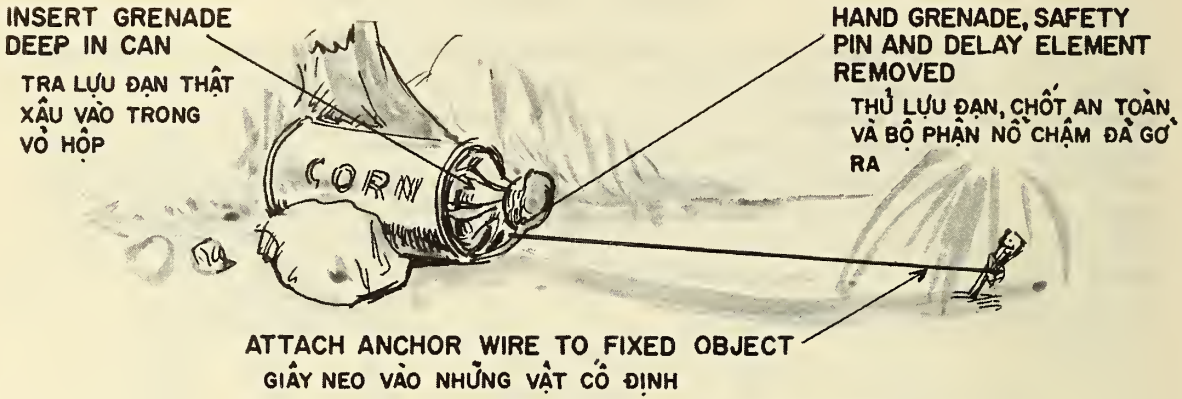
These stakes are made of bamboo and are pointed at one end. They are stuck in the ground and covered with grass. When a gun is fired or a grenade is thrown, troops jump to the roadsides and impale themselves on the stakes. These stakes are generally used along the road going into a village and in ambush sites.

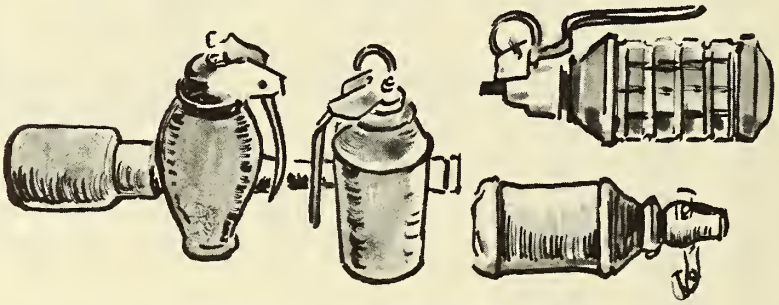
CARTRIDGE TRAP
BẪY BẰNG VIÊN ĐẠN



CARTRIDGE TRAP

This trap consists of a piece of bamboo and a cartridge. A nail is driven into the bamboo 5mm from the bottom to act as a firing pin. A piece of wood is fastened to the piece of bamboo to hold the nail. The cartridge will protrude 5 centimeters from the bamboo. The primer of the cartridge is right above the head of the nail. When a man steps on this trap, the cartridge will hit against the nail, explode, and hit him. This trap is generally installed in the ground on the shoulder of a road and along paths.





TYPICAL GRENADES

CÁC LOẠI LỰU ĐẠN

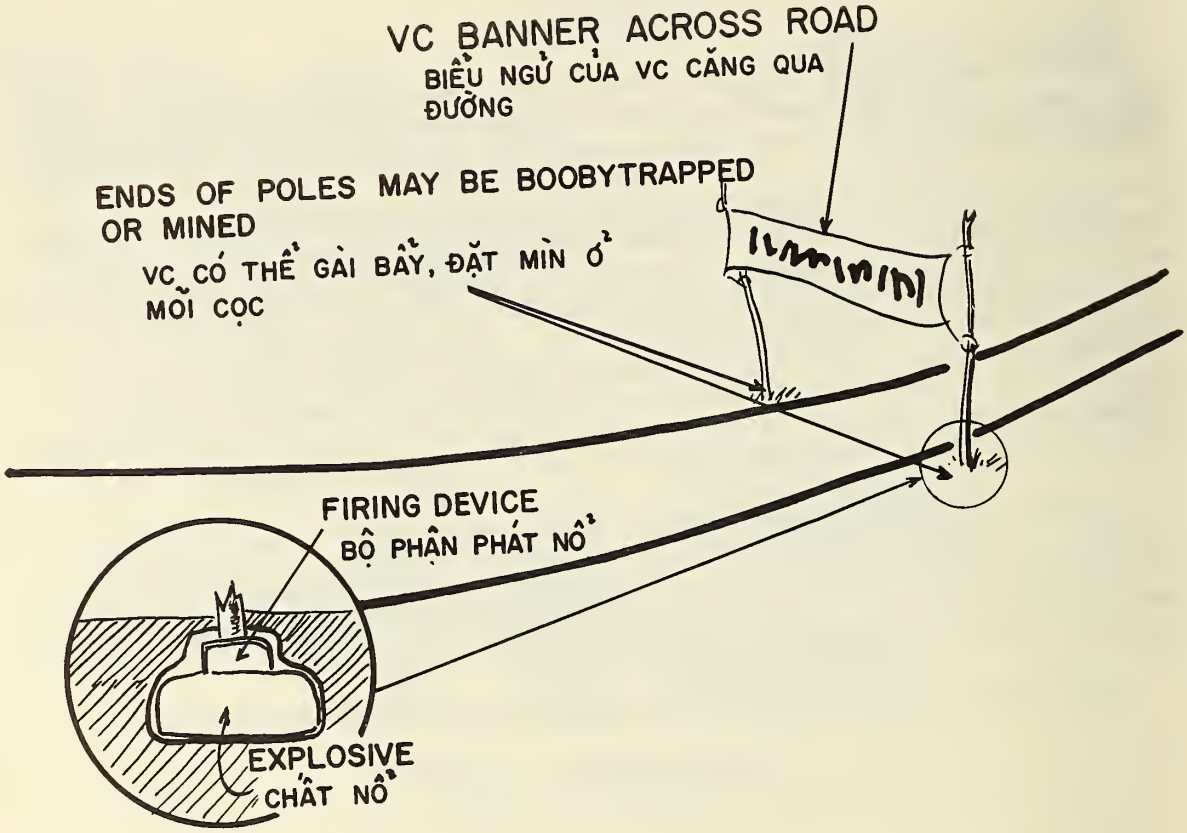
GRENADE TRAP

There are several methods of employing grenades as boobytraps. The more common ones are given here, but the employment of this type of booby-trap is limited only by the user's ingenuity and the materials at hand.

The illustration shows some typical grenades used and one of the most common devices. A grenade is placed in a can, the safety pin is removed and a trip wire is attached to the grenade. When the victim hits the trip wire, the grenade is pulled from the can and explodes. Normally a zero time delay fuze is used. Another common method is to weight the lever of a grenade with some object and pull the safety pin. When the victim picks up the object the grenade explodes. Tying a wire to the pull ring on a grenade and securing the grenade to an object is also used. When the victim hits the wire, the ring is pulled and the grenade explodes.

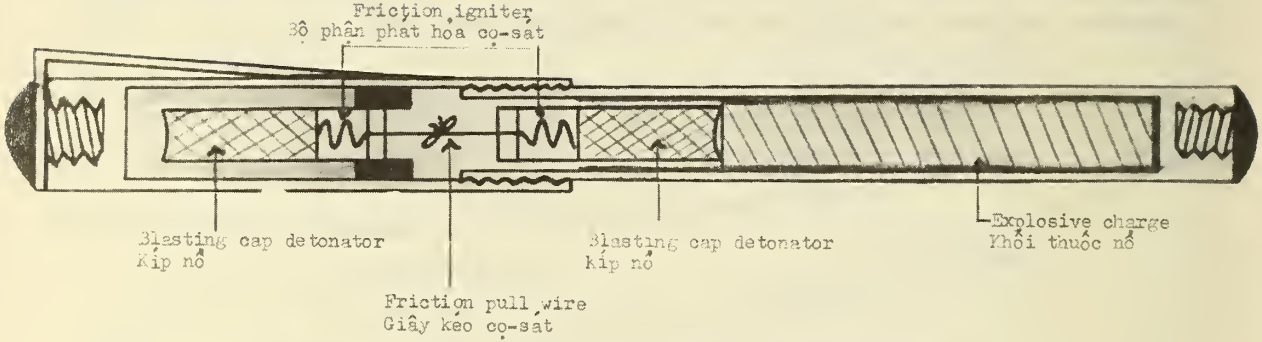
These traps are laid on both sides of routes that troops are likely to use. They have also been placed in hen's nests, bunches of bananas, low hanging coconut palms, orange trees, under boxes, tied to tree trunks, and at both ends of a foot bridge. In the last case the hand rail can be rigged to trip the wire exploding the grenade.

THIS TRAP IS COMMONLY ENCOUNTERED IN AREAS VACATED BY THE VC.


VC BANNER ACROSS ROAD
BIỂU NGỮ CỦA VC CĂNG QUA ĐƯỜNG
ENDS OF POLES MAY BE BOOBYTRAPPED OR MINED
VC CÓ THỂ GÀI BẪY, ĐẶT MÌN Ở MỖI CỌC
FIRING DEVICE
BỘ PHẬN PHÁT NỔ
EXPLOSIVE
CHẤT NỔ

VC BANNER

This is a boobytrap that is very effective. On the surface it appears to be a VC banner stretched between two poles. However, the ends of the poles are attached to firing devices such as the pull or pressure-release types. When a soldier tries to pull up the poles to tear down the banner, the explosive charges are detonated. This type of trap must be carefully approached because the area around it may also be mined.

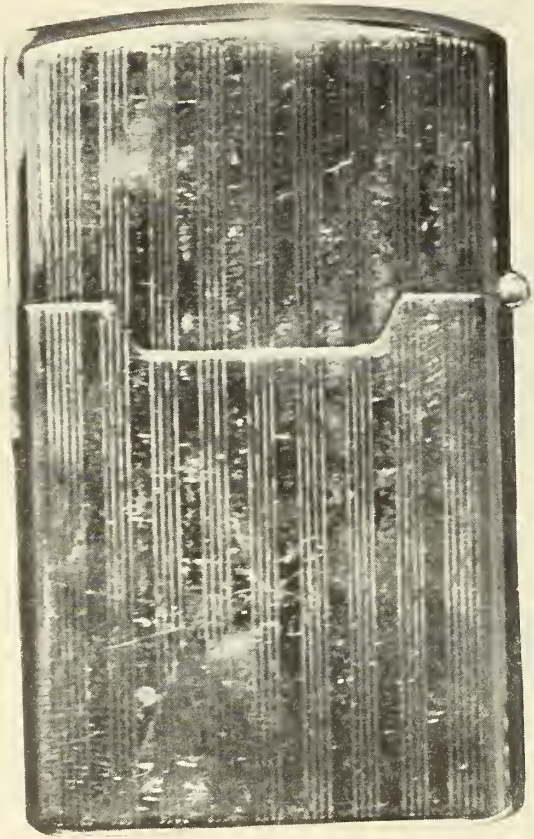

Friction igniter
Bộ phận phat hoa co-sat
Blasting cap detonator
Kíp nổ
Friction pull wire
Giây kéo co-sat
Blasting cap detonator
kíp nổ
Explosive charge
Thỏi thuốc nổ

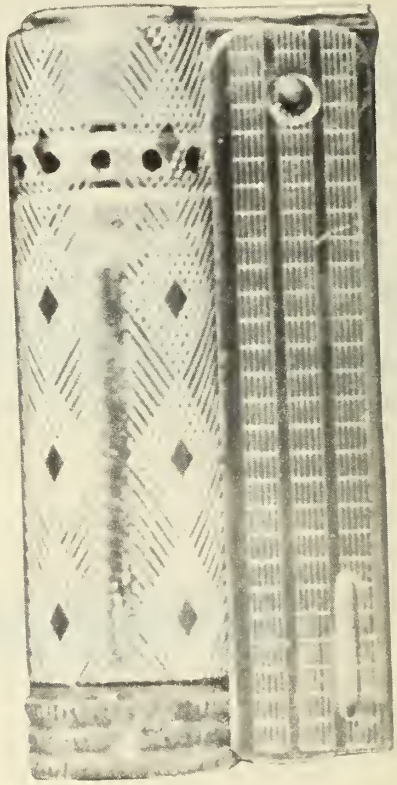
FOUNTAIN PEN SABOTAGE DEVICE

This device is constructed from a fountain pen. It consists of an explosive booster, two blasting caps, and two friction igniters. The explosive components and ignition device are contained in the ink bladder housing and in the cap of the pen.

FUNCTIONING. This device will explode if the cap is removed. Removal of the cap will extract the friction pull wire from the friction cup in the cap, bladder housing, or both, sending a flash into the detonators and exploding the device.

DISARMING. DO NOT ATTEMPT TO DISARM THIS DEVICE. Destroy it in place or notify explosive ordnance disposal personnel.





CIGARETTE LIGHTER ASSASSINATION DEVICE

This device has the outward appearance of a common lighter sold commercially in the Republic of Vietnam. The explosive device is located in the fluid compartment and is composed of a detonator and explosive charge. The detonator is cotton saturated with flammable powders and is placed on the same level as the flint. The explosive is below it in the fluid compartment.

FUNCTIONING. The device is detonated when the flint is struck, causing the detonator to ignite and set off the explosive charge.

DISARMING. DO NOT ATTEMPT TO DISARM THIS DEVICE. Destroy it in place or notify explosive ordnance disposal personnel.

GLOSSARY

Anti-lift device - A mechanism used in boobytrapping that fires an explosive when the primary object is lifted.

Anti-tilt device - A mechanism used in boobytrapping that fires an explosive when the primary object is tilted.

Area Clearance - A noncombat operation involving clearance of mines and booby-traps, which normally takes place after an area has been cleared of enemy forces.

Arming - An action involving the removal of safety devices or the turning of components that rearranges the elements of an explosive item, such as a fuze or firing device, from a safe condition to a state of readiness for initiation.

Blasting Cap - A small cylindrical case with a thin wall in which is inclosed a sensitive explosive such as mercury fulminate or crystalline PETN, used as a detonator to set off another explosive charge. There are two types in military use, one which is fired by an electrical current and one which is fired by flash from a safety fuse or percussion cap.

Booster - A high explosive element, sufficiently sensitive to be actuated by a small explosive element in a fuze or firing device, and powerful enough to cause detonation of a main explosive charge.

Defuzing - Removing a fuze or firing device from a boobytrap or mine.

Delay element - A device installed in a fuze or firing device to delay firing action.

Detonator - A high explosive element used in an explosive train to create or transmit a detonation wave to a booster or to a main charge of high explosives.

Disarming - An act or process whereby explosive items are made safe by proper replacement of all safety devices or removal of initiating elements.

Firing device - A mechanism designed to initiate a train of fire or detonation in boobytraps, mines, or demolition charges. It is generally a separate item of issue. When fitted with a non-electrical blasting cap it may be used as a mine fuze, anti-lift device, or to set off prepared explosive charges.

Fuse (time or safety) - A flexible, waterproofed fabric tube containing a filler of black powder that transmits a flame to fire an explosive charge or non-electrical blasting cap. Burning slowly at a uniform rate, the safety fuse allows a person firing a charge to reach a place of safety before detonation occurs.

Fuse lighter - A device used to ignite a safety fuse.

Fuze - A mechanical device used to initiate a detonation under the conditions desired.

Main charge - The primary or principal charge of high explosives used in a boobytrap or similar explosive item.

Primer - A device used to initiate the functioning of an explosive or igniter train.

Probing tool - An issue mine probe, bayonet, or improvised stiff wire used to locate mines or search around mines and boobytraps for concealed mechanisms.

Safety pins - Split pins, cotter pins, nails, and pieces of wire that are both solid and stiff are suitable for use as safety pins in fuzes and firing devices.

Standard base - A coupling equipped with a standard thread used to join firing devices with standard explosive charges. One end is provided with a hollow shafted prong to which may be crimped a nonelectrical blasting cap. The hollow shaft leads to a chamber on the other end which is formed to hold a percussion cap. Employed in a boobytrap, the percussion cap is fired by a firing device, thereby exploding the nonelectrical cap, which in turn, detonates any explosive charge in which it is inserted.

UG 490 .U5 1965
United States. Army.
Military Assistance
VC - NVA employment of mines
& booby traps

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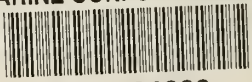

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